

THIS MONTH: 100 OS/2 BULLETIN BOARDS July 1992

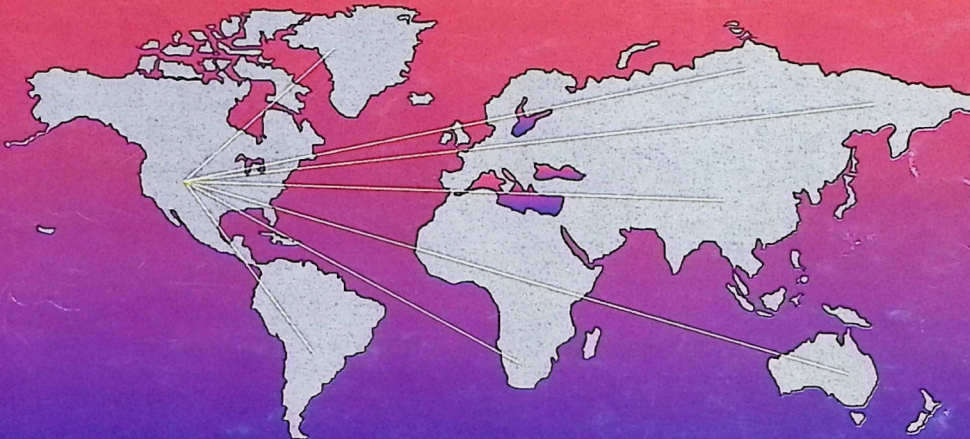
BOARDWATCH MAGAZINE

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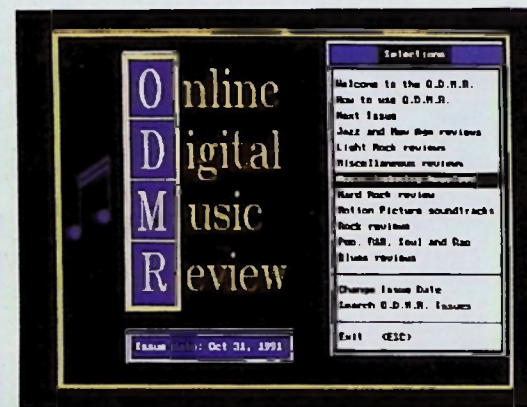
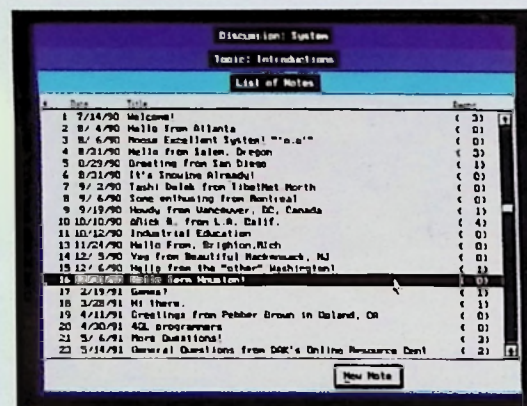
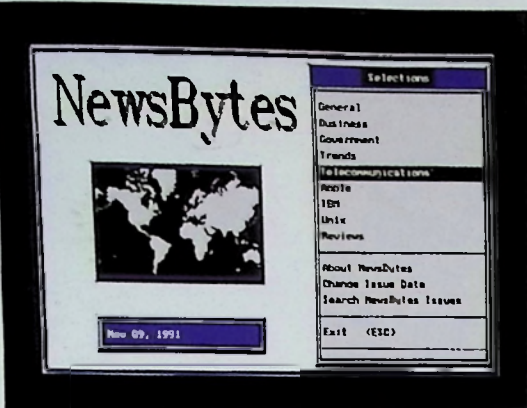
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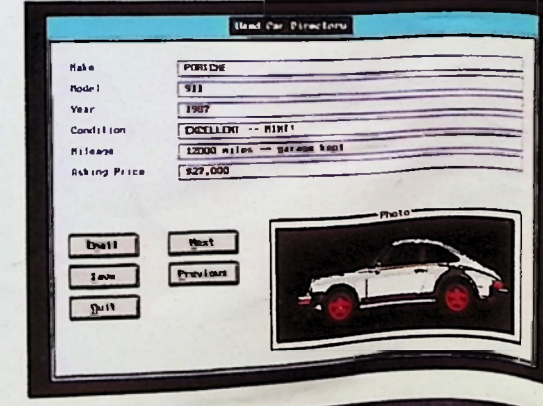
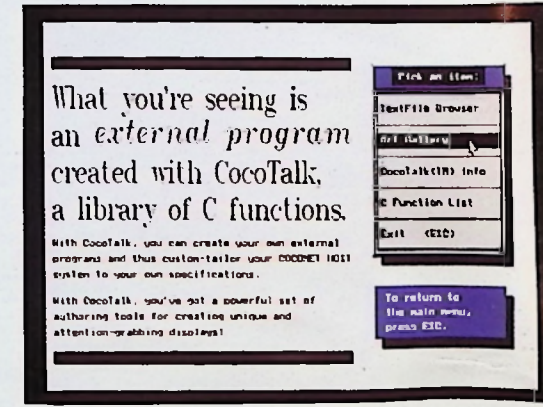
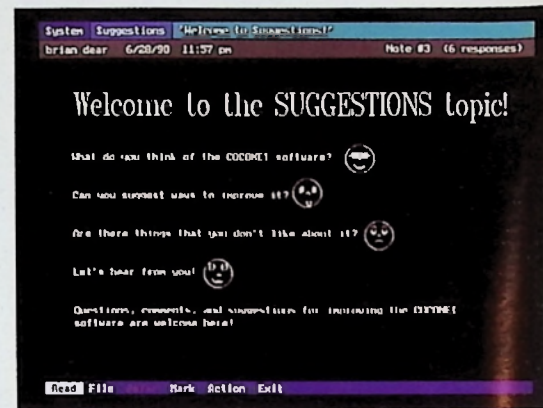
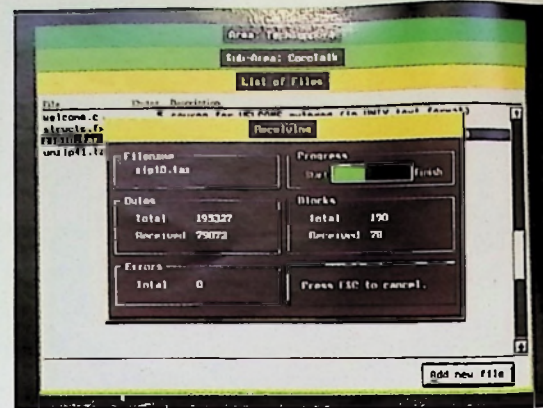
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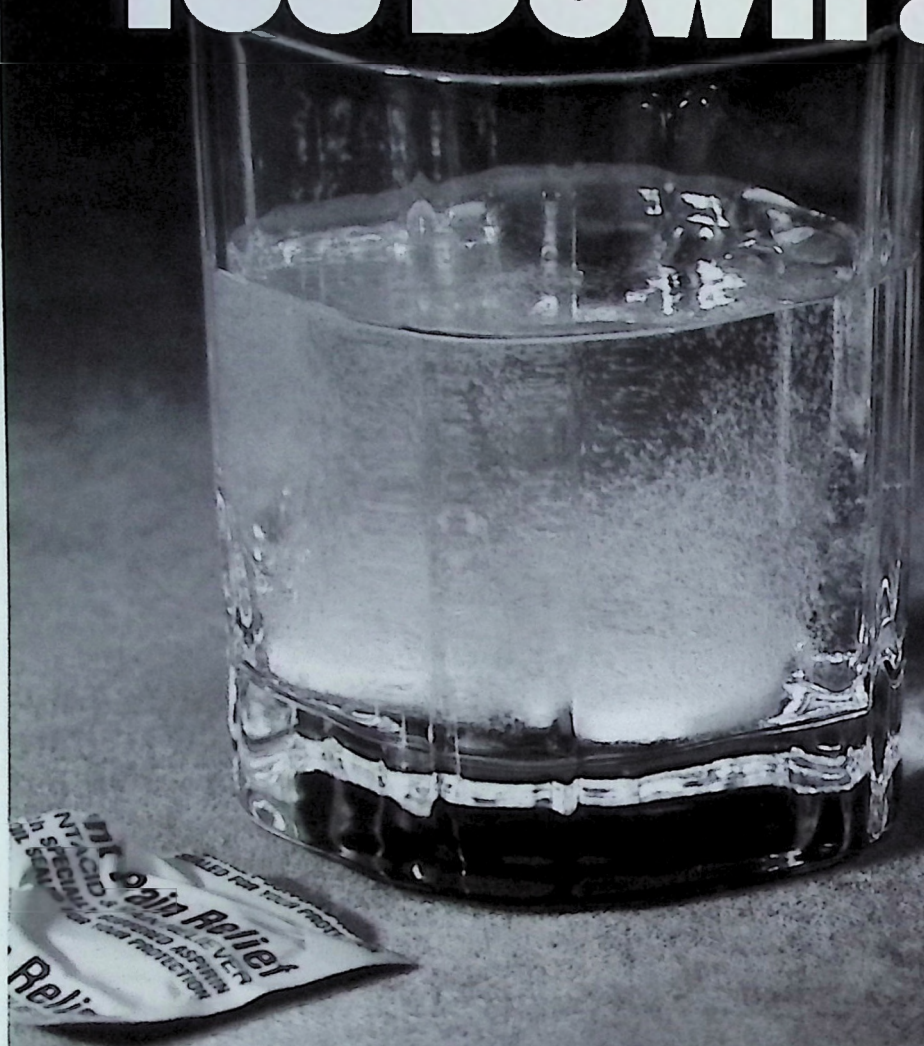
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EDITOR'S NOTES

I came to a revelation today, and as usual such things make my head hurt. I came to it on a bulletin board system but I confess it doesn't have a thing to do with bulletin boards. It was a list of historical documents found in electronic format - things like the Mayflower Compact, George Washington's Inaugural Address, The U.S. Constitution, Thomas Jefferson's inaugural speech, The Gettysburg address, Douglas MacArthur's farewell address to Congress, John F. Kennedy's inaugural address, and Martin Luther King's "I Have a Dream" speech along with a half dozen others. Not a lone example among them I had not read in entirety at least twice before. But I had never seen them all put together in one place on one menu previously. And it was one of those cathartic moments I often find disturbing because they make me think, and as noted, this is generally accompanied by physical pain, loud noises, and the vaguely acrid odor of something burning.

Most of these writings were by men admired for their eloquence, wisdom, or courage in varying measure and degree. We honor them for the contributions they made, usually at critical junctures in our history, when someone just like THAT was needed to ensure the liberties, material well being, and freedom that we almost uniquely enjoy as Americans today among the wretched of the planet.

And in browsing these files, it struck me that this group of leaders and sages was the God quoting-est bunch of men I had ever read all assembled on one bulletin board. They called on God for blessings, thanked him for things that had happened, thanked him for things that were about to happen, noted that nothing would have happened without him and constantly implored his continued protection for whatever real or imagined adventures they were about to embark on. They didn't seem the slightest bit cynical, manipulative, hesitant, or insincere in all this requesting, praying, invoking, and imploring. I'm persuaded every man-jack of them believed every word of it, felt ordained in their very

actions by the hand of God and were damned pleased to be noting it in the most public forums of their day.

I haven't heard a lot about God lately. It's a bit like he's been out of town or something. I'm pretty well grounded in my own beliefs but confess to not speaking on the topic at any length for any number of vague reasons for ever so long. But I haven't heard hardly ANYONE mention the "G" word even casually in maybe a couple of years now. Particularly our political leaders. They just don't refer to him much these days. In fact, I guess I would be surprised to hear one of our elected officials mention God at all. If they did, they would undoubtedly be torn to shreds by the shrill raucous cries of those speaking on behalf of religious freedom, separation of Church and State, personal privacy, and political correctness. And I wonder if those same shrill voices are America - the cumulative group of people who make up America. The heartland. The people that make it work and who's sons have died in a thousand battles spanning two centuries to make sure they can. Or if they are just a small group of really shrill voices that have America cowed and bullied into a kind of quiet accommodating submission.

I do know Murphy Brown had a baby. She wasn't married - and she seemed quite pleased about it. Dan Quayle, favorite of gag writers and standup comics everywhere, dropped a one line reference in a backwater speech delivered approximately nowhere, or within a few minutes travel of there, noting that perhaps celebrating a total lack of moral values and applauding the illegitimate birth of a child on national television might have some significance. And the news media just EXPLODED with indignation and a cacophony of outrage that he would question even casually whether as fine a model as Murphy should not be allowed - nay, encouraged - to give birth without the benefit of clergy and free of the poisonous influence of a man. I don't think Dan actually mentioned the G word - thank G, but he was still trodding on pretty hallowed ground apparently - and desperately dangerous ground for a gentleman of political aspiration.

I was not too affected by Ms. Brown's post partum blues, and not too terribly shaken by Dan-boy's customarily uninspired rhetoric. But I was shocked by the string of invective, outrage, and bile from the television and radio commentary on the matter that followed for two full weeks. It was unnaturally hysterical.

Leon Kelley is a local man, kind of an angry old guy that works with black kids and tries to retread them from the rigors of gang life on the streets of Denver. He notes that he's never known of a gang member in Denver that had a father. He avows that all boys with fathers don't join gangs, and that all boys in gangs don't have fathers. This sounds like it is statistically above the random noise level. Leon tries to be a surrogate Dad and seems to hold some sway with a boy here, another there, a few each year whom he diverts to a life of education and work. I wonder how many Leon Kelley's there are left anyway. I wonder of Leon says the G word.

And I'm told that over 70% of black children born today in America are illegitimate. Somehow, in declaring war on poverty with government entitlement programs we have apparently likewise sworn a war on the black family unit. We seem to be winning that one. I understand that over 30% of our population as a whole - white and black - have the same little family history anomaly. It is my understanding that they burned LA to the ground recently; that we're losing the "war on drugs"; that our educational system is nearing collapse with teachers almost single mindedly focused on their paycheck and their "rights"; that a majority of our Congressional representatives honestly do not know right from wrong or even how to balance their own checkbook - much less ours; that most of our political leaders are in a blatant sell-out to large corporations and are willing to sell our country down the river lock, stock and barrel for the first cash price; that in a country reeking with the stench of money from sea to shining sea we seem to be enjoying an unprecedented propensity to do stupid, disgusting, violent things to each other, our women, and our children.

So I went to church. I somehow don't do that much anymore. But I stopped into the local Catholic church (genetically Catholic on my mother's side) and listened to the casually homosexual priest lisp through about an hour of feel good doctrine covering relationships, inner peace, dealing with the stress of unemployment, and the desperately needed financial support for the church. I couldn't help notice that he didn't mention the G word - not once during the entire service. And I can't really pressure him to get carried away with the G word just for me - what with Jimmy Swaggart and his prostitute problem and Jim Baker being in jail and all for bilking millions of his followers out of a couple bucks each. We're pretty lucky at our Church all in all I guess.

So I phoned a friend and asked if HE'D heard the G word lately. He noted that it had been several years since he had actually heard it spoken aloud. We talked about it for a few minutes before it got really awkward and we both confessed we really felt a little uncomfortable talking about such things. Was it, after all, proper? What if we were overheard? It seemed somehow.....inappropriate.....

Oh well. I'll put my head back in my computer terminal and dial a few bulletin boards, play with some hardware, open a few new software packages. That always gets me back in the groove. A little technology fix. It's nothing I can do much about and I wouldn't want anyone to get upset if "I" said the G word. I just wouldn't want to "offend" anyone.

I hear the Pope is coming to Denver next year. I wonder if I could get him to say the G word.....just once....for old times sake. He could do it in Polish and only he and I need be the wiser. I'm sure it wouldn't offend anyone in any way. It's not like I would be asking for a sign or anything.

The only thing that still bothers me...George Washington's inaugural address sounded so very.....inspired....

Gxx Bless America...

...pass it on...

...(softly)...

Jack Rickard, Editor



LETTERS

Address correspondence to Editor,
Boardwatch Magazine, 7586 West Jewell Ave. Suite 200, Lakewood, CO 80232

Dear Jack:

I don't share your enthusiasm for Ross Perot and our disagreement, of course, is what elections are all about. By now you must have trashed a 13 gallon poly bag for and against, so why waste my stamp and your time? Nevertheless, I think you've missed the point on something that is worth a letter: leadership in general, and political leadership in a democracy.

Alberto Fujimori was elected president of Peru as a stranger to politics, a capable and successful businessman without much in the way of an articulated program, platform, or political philosophy. Voters were so disgusted with the established parties and their candidates that a cipher became a plus, and even had a brief honeymoon of popularity. Right now he's mainly popular with the Peruvian generals and admirals and (you'll

like this) the Pol Potist ghouls of Sendero Luminoso, who think he makes them look less hideous by comparison. He's still an outstandingly capable businessman, manager and man of affairs, and all of these excellent things don't seem to equal political leadership - unless your ideal political leader is a military dictator.

Managerial skill and energy and vision are qualities of greatness, as a re compassion and honesty and a decent respect for the opinion of mankind. But a great political leader in a democracy seems, above all, to be one who articulates the unspoken political program of great masses of people, who sees the reason in their actions and accepts it as his own, who becomes their leader by expressing their ideas and their will: such a one was Martin Luther King. Most of our presidents haven't been great political leaders, but a few of them were and we all know who. They're the ones with monuments in Washington. All were competent men of affairs but not outstandingly so, who relied on brilliant subordinates to fill in their gaps. (Lincoln for example: not exactly a Napoleon as commander-in-chief, but would you trade him for President Grant? Or President Bonaparte?) Still, there's no reason why a brilliantly suc-

successful businessman couldn't show this kind of leadership. John Hancock comes to mind. Of course there wasn't any doubt about his program or platform or political philosophy. We all know where he put his John Hancock. But as proud as he clearly was, of himself and his vocation as well as his ideas and his role in history, I think he would have been dumbfounded to hear anyone say: "What will he do? What does he stand for? Who CARES? He's exciting. He has a true leadership quality."

Yours truly,

David Lefly
Chicago, Illinois

David:

I think it is interesting to examine the type of background of our better leaders, but I would imagine it to be something like examining the background of those who use modems. The most likely thing presidents will have in common is that they were elected to office as President. They've been lawyers, actors, businessmen, military heroes, rich and poor. That the president of Peru was a businessman and is not a good president leaves me a little disinterested. I think a peanut farmer should have been much more representative of my view of the world than a Hollywood actor, but actually, he wasn't and by a good margin at that.

Leadership is hard to quantify. But the history of our democracy would seem to indicate a common distrust of professional government bureaucrats and politicians. The concept is that we elect the best and brightest from those AMONG US to govern our land. The political cadre in Washington D.C. have become so much ingrained in a professional cult of politicians and bureaucrats that I'm going to guess a majority of Americans view THEM as distinctly different from US and they in turn view US as distinctly different from THEM. The woefully slim percentage of our population that goes to the polls is not a reflection of apathy so much as realization that there is not much likelihood of it doing any good. The choices are ALL professional politicians.

And those in government are inclined to keep it that way of course. The campaign financing and polling laws are all

not so subtly bent in that direction. This past month, the United States Senate voted on a bill that would have allowed voter registration quite conveniently when you apply for a drivers license. It failed rather dramatically. These people don't WANT all Americans active in politics. They want you to leave it up to the politically savvy party members to elect THEM and let them handle what they are trained to do.

Ross Perot has indicated he might run for President. Immediately, everyone jumps up and claims they don't know what his "platform" is. I've listened to Bush and Clinton, among others, for half a year and I don't know what their "platform" is in the same sense. Actually I do, their platform is to get elected President and it doesn't go 15 inches beyond that. They will say anything, to anybody, at any time, if they perceive it advances the cause of getting elected.

So the "what is his platform" issue is really, in my mind, a red herring. And I think a lot of people really won't care. I'm personally irrecoverably opposed to his positions on abortion, gun control and economic trade. And yes, I have a few questions about the man. But voters are under the impression that if they send Perot to Washington, they will send a message that will shake up that professional clique and remind them that WE are the government - not just the rubes who bought into their sales pitch. I think it is a good time to send such a message.

Finally, along with the professional politicians, the fourth arm of our government, the news media, is also visibly shaken. I delight in watching them frantically, almost hysterically, raking for an angle to attack this man with, and his adroit, even good humored way of pointing out kindly that they are a bunch of buffoons and don't represent the American people either. He's regularly on camera, but in response to each attack, he simply refuses to acknowledge the legitimacy of the game they play, and instead talks to the interviewer as if they were a real person. It's charming, disarming, and entertaining. But you're right, it could be dangerous as well.

Jack Rickard

Dear Jack Rickard,

Blessed in our time be those who can give measured offense, for we need and delight in them above all others. I'm referring in particular to your reply to the hapless "Bob" in the April Boardwatch. Such a verbal mauling, and such common sense expressed on a variety of matters, could hardly have been bettered by Dr. Johnson himself. I'm calling up my friends and reading both letters to them. Could you find it in your heart to post them on the WELL, or give me permission to do so? Perhaps the

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Unclear conference would be the right place. I haven't enjoyed two pieces of writing so much in a long time. (Honestly, though, is there really a Bob, or did you set the whole thing up? If not, could you try to draw him out a little on that coming gender war in South Africa? I'd like to know more. Not since Lysistrata...)

I've tried getting the Internet growth statistics you mention in the March Boardwatch. `nis.nsf.net` claims to know of no directory called 'nsfstats.' Nor any of the other directories you mention on page 45. Any suggestions?

Again, my congratulations on the most consistently useful and literate magazine I know of. The best is that you seem to be having so much *fun* with it! I hope to meet you in Denver at BBSCON.

Sincerely,

Dick Anderson

Dear Dick Anderson:

You have my permission in this instance to post both letters on the WELL as you deem appropriate. Bob is, to my knowledge, quite real, and anything of my design would most probably not be along those lines.

Further, I recently had an experience with another magazine where they printed PART of a letter a gentleman had sent to them. They simply excised the parts not complimentary to themselves and left the laudatory remarks as the letter and printed it. Being a tad naive, I was shocked at this. We do not print all the letters received at Boardwatch - barely a fraction of them. And I admit that the ones printed are largely based on whim - those that seem "interesting." But if we do print one, we reproduce it as closely as we can to what was received - spelling blunders and all. It is a great revelation to me that other magazines edit letters to the editor to cast themselves in a good light. Why bother with it at all?

As to the NIS, I did an ftp back into the service, and as you report, things have changed a bit since our March report. There are a lot of political hot potatoes right now between ANS, CIX, and the

other children of the net who can't play pretty and I suppose rearranging the furniture is an outgrowth of that. Some sanitized statistics are still available. `ftp.nis.nsf.net`. Then do a `cd nsfnet/statistics` (note there is no leading / character). Subdirectories beneath that are listed by year. The file names appear to have been changed to protect the innocent, but statistics on NSFNet traffic appear to be available there.

You've found me out. It is with some guilt I admit that while the world struggles with an increasingly perplexing mix of ponderables, I'm mostly just having fun. We work hard around here, but aside from the usual niggling house-keeping chores that accompany any endeavor, we focus on what we like and try to do it well. Life has improved measurably thereby and were it in my power, I would decree that the world at large adopt similar policies. It is gratifying to hear that we are hitting the mark.

I am increasingly pleased with the many turns, small and large, that the ONE BBSCON is taking. Numerous companies and individuals have gone from skepticism to wholehearted support of this event and most of them are working furiously to develop significant announcements and products to "wow" the show. With that number of individuals and groups striving to make a splash at this event, I've got to guess I don't really have a clue as to just what it will look like myself - but I can't wait to see it. And I look forward with distinct pleasure to the opportunity to talk face-to-face with you and many of the other participants in the online experience.

Jack Rickard

Jack--

First of all, let me say that **Boardwatch** is definitely the magazine I most like to see in my mailbox, **Midnight Engineering** running a close second. I can't begin to read all the magazines I receive, but I wouldn't miss Boardwatch for anything.

This brings me to the purpose of this email. I'm looking for a shareware UNIX BBS program that I can run on my SPARCstation, but I don't know where to look in the back issues of Boardwatch. I suppose I should sign up

for your Boardwatch BBS service... Can it be added on to my existing subscription, prorated somehow?

Anyway, if you have any pointers to a shareware UNIX BBS program, including, if known, an ftp site to get the code, I'd appreciate it.

Keep up the great work! Give us a 150 page Boardwatch!

Steve Diamond
SunSoft, Inc.
Mountain View, CA

Steve:

There are two shareware programs I'm aware of for Unix, and note that I am a little short of the final word on this subject. They are XBBS and WAFFLE. I would say at this point that XBBS is a bit long of tooth, and I see WAFFLE discussed most often. WAFFLE is interesting primarily in that it swings both ways - with a DOS and a UNIX version. It's also interesting in that source code is available for a fairly moderate (\$120?) fee. It was written by a gentleman named Thomas Dell who operates a company entity titled Darkside International, PO Box 4436, Mountain View, CA 94040. He does operate a BBS where you can download the software at (408)245-7726.

There is also a rather intriguing commercial BBS product you might want to at least look at. They're pretty proud of it pricewise, but it does some very interesting things. It's titled TEAMate by MMB Development. We reviewed Supernet International in our last issue, but you can browse about and have a look with `telnet supernet.ans.net`.

Subscriptions to the magazine are \$36 annually and to the magazine and BBS \$60. The BBS carries electronic back issues of Boardwatch going back to January 1988 with a search index, shareware programs we review in the magazine, and various online text publications. In general, if you have an existing print magazine subscription and renew early to take the print/and BBS access, we just eat the difference of BBS access for your remaining initial subscription. It's not that it makes sense, it's just that it's easier in an accounting sense to do it that way than to pro-rate

things. We don't push the BBS too hard because it's rather always in a state of experiment, trying out CD ROMS, testing new modems, etc. It's up most of the time - but you take your chances. But we do have a contingent among our readers that like to dial in and see what we're playing with this week. And of course, you're welcome to do so.

Jack Rickard

Jack:

Picked up a copy of "Boardwatch" magazine today on the way to see Lethal Weapons 3. Who do I find on the front cover but H. Ross Perot! Found the article interesting.

The only item of information missing in the article was that there is a FidoNet Echo setup for Perot for President. The echo is NOT on the FidoNet "backbone" at this time. I pick it up from 1:260/246 in New York state. A number of local systems pick it up from my BBS also.

The "tag" for the echo is PEROT_92. I have a Intel 14.4ex modem here and any system that wants to pick up the echo from me can do so at speeds from 1200 to 14,400 baud.

Howard's Notebook has been in operation since June of 1982. We are a environmental, peace and social justice BBS. BBS number is: 816-331-5868.

One comment on your EXCELLENT magazine. It would help if you would always give a boards FidoNet number, maybe you do. You mentioned Rogers Bar BBS... I guess I could use use a node search program and check for it.. but just wanted to remind you please... list FidoNet numbers if you have them.

Thanks..

Jim Howard

Howard's Notebook 1:280/25@fidonet

Jim:

Perot for President bulletin boards are springing up everywhere. Dave Hughes converted Rogers Bar (1:30577/100) in Colorado Springs at (719)632-3391 to a Perot for President BBS. He estab-

lished two echomail conferences, one of which we carry here on Boardwatch (1:104/555). He also did something a little bit interesting. The PEROT conference is ported to Internet to a news group titled *co.politics* here in Colorado on the CSN.ORG system. I understand that people from Internet sites across the country are tapping into this (contact dcn@csn.org). He's also somehow ported it to a mailing list as well. In this way, comments from the *co.politics* newsgroup, the mailing list, and the PEROT echomail conference are all shared - rather widely by now.

The Washington State Perot for President headquarters in Seattle also has a system up and running that might prove interesting. It operates at (206)223-0071 but I don't know if they are in FidoNet or not.

I thought we were going way out on a limb with our May cover story on Perot. Apparently (NOT!). He's actually leading the polls in several states and at this point, the race is between Perot and Bush it would appear. Bill Clinton is just out of it at this point. The Perotocrats (Peroticans?) are forming up in all states. I think it's still an uphill battle, but it can be done. I'm most thoroughly delighted to watch the television and print media squirming over this one. They are DESPERATELY seeking something from this guy's past and are digging up stuff from 1954 to try and tar him with. Each time they come out to bash him, he comes off looking fantastic and they wind up looking like a bunch of cretins. I actually stayed to work tonight because I was certain I would be too embarrassed for Barbara Walters when she tries to tangle with him tonight on tv. If the battle is Perot against the media, they lose. Perot against Bush may be another story - but I put my nickel on the little guy from Dallas. He's the only one that might actually say the G word out loud and get away with it.

Jack Rickard

Dear Jack:

Moving back to paper mail in Chiang Mai - this stuff is not time-sensitive and the Thaipak connection to MCI Mail is expensive - I'm going to have to wangle a real Internet address at the University.

Ross Perot on the cover of Boardwatch! Ross and I go back a ways. In the early 70's, I was hired by EDS to work in NYC - I was a young sprout, then, and this was my first "real job."

Well, EDS was a weird place. The managers were all ex-Marines and Tough Ladies, enforcing a dress code tougher than the FBI. True story: one of us SED's (Systems Engineers Development?) left work for 3 weeks in the Marine Corps Reserve - came back, and the FIRST thing his manager told him was "get a haircut!" We had to keep it real short - we all looked like billiard balls in suits. You could tell an EDS employee from two blocks away on Wall Street. Even the IBMers pitied us; though of course Perot simply imported the dress code of his alma mater, by the early 70's IBM had cut its employees some slack (allowing loafers or whatever), and so the IBMers dressed more loosely than the EDS'ers, who were to some extent pitied and ridiculed I believe.

My job duties were, precisely speaking, "gofer." As an "SED" I was getting "exposure to EDS business methods" or whatever. I did a lot of Xeroxing. So did everyone else. We did this low-skill one-banana stuff for all the hot-shot Texas managers while waiting to be sent to programming school. One plus: I made a lifelong friend out of EDS, a fellow SED named Jim Umberger, who worked for a while at the next desk.

It was depressing - we were bounced around from site to site, knowing nothing about computers but expected to help solve computer problems. I "worked" at a brewery and a Blue Cross joint - watched WaterGate that summer during lunch - spent most of my time at a brokerage. I met H. Ross one time - he glad-handed me and "Howdy Partner'ed" me and I remember being struck by what a homely little runt he was - electrical presence but I seem to recall an enormous nose - he didn't like using his profile. And he was real short - a bit of the Napoleon then, maybe.

All this is irrelevant except what came next - EDS fired me! This was not your typical dismissal, either. To understand it, you need to know that Ross had taken over a brokerage firm to save it from going under. And there by hangs a tale!

YOU COULD RUN SYNCHRONET OR YOU COULD SETTLE FOR MEDIOCRITY.

Multiuser bulletin board systems have been around for a long time. Too long perhaps. Isn't it about time for bulletin board system software conceived and designed in the 90's? From the smallest hobbyist BBSs to the largest commercial pay systems, Synchronet offers sysops and users more features and conveniences than other systems could ever dream of. Features other companies charge thousands for and most don't even offer like the new 976/900 automated billing module, full multiuser chatting, QWK mail packet support, and even multiplayer Blackjack. And Synchronet does

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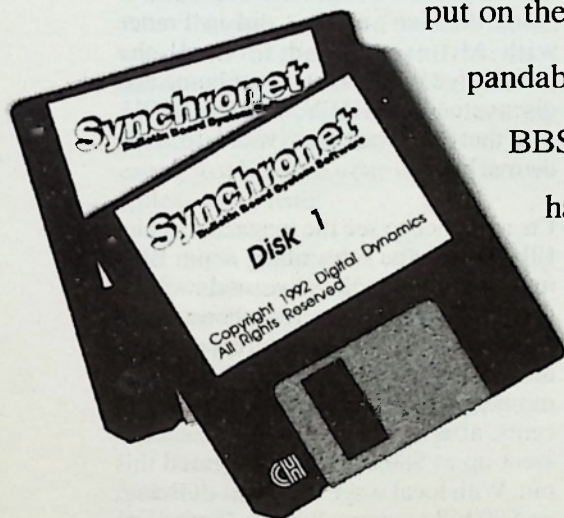
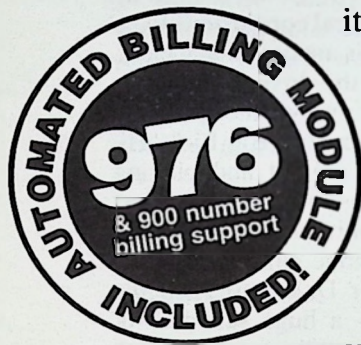
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had to settle for mediocrity. Thank

goodness the old days are over.



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Super high speed message base system:

Powerful internal editor with full ANSI color plus external editor support!

QWK mail packet support built-in (offline reader).

Mailbox oriented E-mail system.

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Batch uploads, downloads, and bidirectional file transfers.

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CD-ROM and slow media support built in! Including optional automatic copy to and download from temp directory!

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Directories can be sorted by filename or date, ascending or descending.

Sysop internode control (local or remote):

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Real-time internode message services:

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Trade Wars, Food Fight, Global War, The Pit, and Pit Fiend compatible plus 100's more!

Multiple BBS door file formats supported.

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EDS was a growth stock and got as high as \$160 on increasing sales and profits. A big chunk of recent growth was brokerage. If the brokerage had gone under, EDS revenue would have declined for the first time in EDS history - very bad news for the stock price which made up Perot's net worth. So Ross bailed out the brokerage. When another customer began bleeding red ink - another brokerage firm - the two sick puppies were merged into one house over one bloody weekend in NYC. EDS was hurt, but not fatally. One of the mergees was Dupont Glore Forgan, the other was (?) Morgan Stanley (?). About this time I realized that the plain cowpoke from Texas had another face entirely, gliding around Manhattan in limo's full of corporate attorneys. (What I didn't know before last week was that the Nixon White House was involved in this, using Perot to stave off disaster on Wall Street. I little dreamed, in those days, that Tricky Dick had his fingers in this pie as well...)

So Perot wound up with two brokerages on his hands, and merged them into a newly-named outfit. More important for me was the fact that he now had duplicate computer centers and duplicate corps of people in EDS - particularly trainees. A classic lay-off situation, but EDS did not lay anyone off! The word went out, and about 800 people were FIRED in the next two weeks. As I understand it, a layoff exposes you to increased unemployment insurance premiums, while firing people does not. So - and very dishonestly - a huge number of good and excellent employees were summarily fired. The reasons were wierd - my own case, I had all my white shirts in the laundry and was 15 minutes late to work (9:15 AM). Turn in your badge Puterbaugh, you're fired.

That was my first computer career! You can imagine how well subsequent job interviews went: "Prior experience?" "EDS" "Reason for leaving?" "Fired." It just didn't stimulate the hirers. I went back to California and a letter arrived out of the blue - from EDS!

"Dear Puterbaugh -

EDS finds that you terminated employment early without completing one year with EDS as agreed, and therefore you must repay to EDS the \$1850.16 in

moving expenses which EDS incurred in relocating you to NYC. Please submit a cashier's check by return registered mail.

Yours,

Bureaucrat."

My reply was addressed to H. Ross, not the bureaucrat, and may have been the most eloquent piece of hate mail I've ever written. I never heard from that guy again. Having had this intense early experience to this leathery old pirate at such a tender age, I've always had my doubts when he was being hailed as a national hero. My own experience with EDS - very much a projection of Perot himself - included

1. Humiliation and overwork - at very bad pay.
2. Unjust termination.
3. Firing people just to save a dishonest buck (instead of lay off)
4. Harrassing me unjustly for having violated THEIR trust. Ho ho!

I concluded that H. Ross was an enormous hypocrite with delusions of grandeur. Undoubtedly he's a complex person - the Iran rescue does show what a gang of military managers can do - but I found it very amusing that the movie people hired Richard Crenna (tall and bland) to play H. Ross, the peppery little gnome with the heart of a snake. One of my private hobbies is following NeXT Computer - I have some idea of what a sweetheart Steve Jobs is - now he's in bed with Ross Perot. If I were Steve, I'd be watching my marbles. A big fight between Jobs and Perot might be fascinating - they're both mean and they both play for keeps.

In any case, it seems real obvious that Perot has a fascination with the military - remember his Xmas plane to Vietnam? I'm not sure how much I would appreciate that in a President. After all, his "business" is purportedly computers - although you'd be very hard-pressed to find ANYONE who'd ever consider EDS services state-of-the-art. They're basically another service bureau with delusions of grandeur - I NEVER understood why GM bought them!

My buddy Jim continued with EDS for a year or two - I once asked him why Merrill Lynch didn't just hire EDS instead of having a huge \$50M computer

center. He told me (rightly) that, for a brokerage, EDP was part of the competitive edge - accurate, timely statements, useful mailings, etc. If Merrill Lynch used EDS they'd just get mediocrity and probably not save much - EDS was never cheap.

I posted this (most of it) on the Internet about 7 months ago, in response to a query "Should I go to work for EDS?" It attracted a vigorous denial from a female employee of EDS - she actually claimed that EDS was "better these days." But I also got a number of replies from people who knew what I was talking about - the EDS that discriminates against blacks and women, the nasty little company. Do some snooping around on H. Ross Perto - be a journalist! Don't take the man at his word - that went out with Jimmy Carter....

Actually, the political conclusions to be drawn from all this are not all that clear. The people with the drive to be President are never (or rarely) "nice people." (That was Eisenhower's Big Lie) "Hi, I'm just loafing around and playing golf" when he was in fact of the most driven and controlling Presidents in our history - long phone calls each A.M. from John Foster Dulles to keep the world in shape - a huge schedule of meetings not on public calendar, etc., etc.!) Right now I feel gloomy - people in the U.S.A have been playing "Vote for Dollars" for so long that I'm pretty sure they don't really understand there's not way to vote 3 1/2 trillion into the bank! I guess we'll get another round of "soak the rich" as they did in France with Mitterand, and then all the \$45,000/year Socialists went home and discovered that THEY were the RICH, and that they had just voted to soak themselves!

It's reall nice to see the magazine again. I'll probably be subscribing soon. BBS in Thailand is only alive and well in Bangkok - cheap metro phone calls. Long distance is hideously expensive - during the day Bangkok is 72 cents a minute from here, 6:00-10:00 PM 36 cents, after 10 24 cents. My phone bill went up to \$80.00 before I figured this out. With local wages and cost of living, an \$80 bill is approximately equivalent to \$200 in the U.S. - REAL expensive!

All my best! Say Hi to Ross!

G.S. Puterbaugh
Chiang Mai Thailand

P.S. What the heck - sign me up for another year! Address on check. Thanks a million and good luck....

Dear G.S.:

Thank you for a strikingly picturesque description of the peppery little gnome with the heart of a snake. As you said, the political conclusions to be drawn from all this are not at all clear; but you illustrate, and very effectively, a different and intriguing side of the Perot for President candidacy - a side I'm frankly interested in learning more about.

I think it would be likewise interesting to hear the point of view of those fired or otherwise mauled by Clinton and Bush. As you point out, men of accomplishment leave a trail - of bodies as well as friends.

Give our best to the Thai online community.

Jack Rickard

Dear Mr. Rickard:

I recently subscribed to Boardwatch Magazine because I am pondering starting a BBS of my own and I wanted a magazine with specific information for which I figured out Boardwatch was the best (only?) example.

After having followed your editorial comments for the last several months, I have come to a conclusion - I may never set up a BBS, but I will continue my subscription to Boardwatch in any event, just because your writing is such a pleasure to read!

You might (next time, when enduring slings and arrows of outrageous censors) use the argument I intend to, that a BBS sysop is in the position of a librarian, not a watchdog. The library is freely open to all, or it is no longer a library but a political-agenda'd bookstore.

Sincerely,
William D. Clarke
Portland, Oregon

P.S. I like the fact that you are not Politically Correct.

P.P.S. I also like the fact that you are "quaint and old-fashioned".

P.P.P.S. My computer is getting fixed - I hope you can read this.

Dear William:

I'm pleased we're hitting the mark in Portland. The library/bookstore analogy is a good one, and pretty much the point to some degree in Boardwatch. There may be good reasons for or against any particular advertised product, bulletin board system, or theme. That does not imply it would be a good reason to or not to cover them or allow them advertising space. That we publish a story about a particular BBS does not necessarily mean we think it's the thing to do, it means we observed that it was a thing done.

Glad you're staying with us anyway, but I hope you do get your BBS up and running. It does take it's toll in a lot of ways, but 44,000 sysops can't be wrong - it can be very rewarding in a very rich set of ways.

Jack Rickard

TELE-BITS

CORRECTIONS/ERRATA

The two-line plus console version of eSoft, Inc.'s BBS program, The Bread Board System, was listed at \$399.95 in the June issue. The price of this product has always been \$295.

RUMORS

Quarterdeck Systems is rumored to have found a BBS with their copyrighted DESQview and other programs available for download. They are prosecuting the operator for copyright infringement and the company is rumored to be struggling with the right tack to take. According to inside sources, they do intend to vigorously prosecute the "bad apple" BBS operators who do pirate software, but at the same time, the BBS market for their DESQview oper-

ating system and their excellent relationship with most of the BBS community is highly regarded within the company.

The Hewlett-Packard HP95 palmtop computer has been immensely popular - particularly among the engineer/gadget crowd. But it has proven to be a little picky about what modems it works with. U.S. Robotics is rumored to be about to release a modem designed specifically for the HP95. A modified version of the WorldPort Fax/Modem, it apparently will include the communications software in the modem itself - about \$249 for 2400 bps plus 9600 bps fax.

Washington D.C. is about to get a community BBS - rumored title is CapAccess and it will most probably be a FreeNet, patterned after Dr. Tom Grundner's Cleveland FreeNet. Insiders tell us if they do use the FreeNet software, it will be the largest free community online service in the world.

Tagline seen: Psychoceramics - i.e. the study of crackpots.

Who is the voice of voicemail? More than 40 million people have heard a single woman's voice on various voicemail recordings announcing the time, the temperature, and various telephone error messages. Her name is Jane Barbe and she records voice messages for Octel, the largest manufacturer of voice mail equipment in the world. Barbe lives in Atlanta with her musician husband John.

With IBM's introduction of OS/2, Bill Gates seems to be responding with a trick he learned from IBM - FUD. FUD stands for Fear, Uncertainty, and Doubt. The way the game is played, is at a competitor's introduction of a product with more features than yours, you announce a host of features yours WILL have sometime Real Soon Now. It takes the edge off the competitors announcement and leaves the world in a stew of Fear, Uncertainty, and Doubt about which product to plan for - the new release, or the even better things to come from the OTHER guy. It works. The latest in the ledger of all the fabulous things Windows WILL do includes Microsoft's Mail 3.0 functions built into the next version. This could be impor-

tant (FUD incoming). So far, there is ONE dominant e-mail package cc:Mail. All others add up to statistically nothing in the PC world. And cc:Mail ONLY appears on LAN systems. Microsoft's Mail package has actually been getting pretty good reviews. But by putting it in Windows - they get an automatic installed base of some 9 million PCs - many of which need a LAN e-mail package like they need a sardine sandwich - now. But more desktop iron is making the LAN connection all the time. And many of the LAN installations that use cc:Mail now have Windows on the system as well. The product may have other peer-to-peer networking functions built-in like printer sharing, chat, etc. Some claim it may be a competitor to LANTastic or Netware Lite and lead to eventual connection to Microsoft's big gun LAN Manager for server applications. Sounds pretty good actually.

Apple intends to make all things clear to the apostalate via a videotape describing their future plans with the IBM alliance and all the good things to come from the collaborative technologies issuing as offspring from this marriage. Titled, The Apple/IBM Alliance, the video is FREE at (800)635-9550 extension 805. Sounds like a possible collectors item.

And speaking of IBM - they seem to have gotten the picture on hardware prices. They've spent the last few months deciding NOT to buy a clone house, Northgate in particular. As soon as they broke off talks, Everex moved in and picked Northgate up for \$4.5 million - considered a bargain price. Rumor has it that IBM has decided to go another route - picture a 30% across the board price cut on their PS/2 line.

TELEPHONE STUFF

The House Judiciary Subcommittee on Economic and Commercial Law voted 10 to 6 on May 28 to recommend passage of a bill restricting the rights of regional Bell operating companies (RBOC) to enter information service businesses.

H.R.5096, The Antitrust Reform Act of 1992, introduced by Democrat Jack Brooks of Texas in April now goes to the Judiciary committee as the last stop on the way to a vote of the full House.

Last October, Judge Harold Greene was reluctantly forced to lift the ban on entry to information services enacted with the Modified Final Judgement breaking up the Bell system in 1984. In doing so, Greene noted bitterly the history of non-competitive behavior by the Bells and warned of dire consequences to any competitors if they were allowed entry into the field. But under orders from a higher court, he did lift the ban. **H.R. 5096** seeks to make the restrictions that were part of the Modified Final Judgement into law - significantly delaying RBOC entry into such fields as information services, equipment manufacturing, and long-distance markets.

RBOC representatives erupted into a fit of anger describing the bills as anti-competitive, anti-consumer, anti-business, and unconstitutional. Their representatives in the Bush administration vowed the President will veto any such bill that passed the Congress. Newspaper industry representatives on the other hand, who had backed the bill, were delighted.

The battle over RBOC entry into information services pits the newspaper industry, suffering from years of declining revenues, against the telephone companies, who fancy the opportunity to carry yellow-page ads and perhaps classified advertising into online markets.

GPO WINDO GOVERNMENT BBS VISION EXPANDED

A bill establishing a large central government electronic bulletin board system got a shot in the arm in June.

Senator Albert Gore of Tennessee, with co-sponsors Wendell Ford of Kentucky, Paul Sarbanes of Maryland, and Paul Simon of Illinois, have introduced a Senate version of the House of Representatives GPO WINDOW bill on June 4th. **S.2813** is titled GPO Gateway to Government and is similar to **H.R. 2772**, originally introduced in the House of Representatives by Congress-

man Charlie Rose, Chairman of the Joint Committee on Printing (GPO oversight committee).

The bill calls for a single government BBS to serve as a gateway to all government electronic data and federal databases. The BBS would be operated by the Government Printing Office. The service would be free to 1400 federal depository libraries and available by subscription to others at prices related to the incremental cost of disseminating the information. The service would be available both by dialup telephone lines and via the Internet. In both houses of Congress, the measure appears headed for a win.

At least one BBS operator is not very happy about the matter. William Mayo operates **THE BOUNDARY LINE**, a Real Estate BBS in San Francisco at (415)398-6171. Mayo's system carries all Real Estate related opinions from the U.S. Ninth Circuit Court of Appeals, the California Supreme Court, and the California Court of Appeals. He freely retrieves those documents from the U.S. Ninth Circuit Court of Appeal's BBS at (415)744-9022 and the Judicial Council's BBS at (415)904-9454. Essentially, he filters out all non-real estate information as a service to attorneys, realtors, lenders, developers, architects, environmentalists, appraisers, and so forth that make up his caller group.

About two years ago, the U.S. Supreme Court began Project Hermes, a program to disseminate Supreme Court opinions electronically with the specific mandate that it be to the widest possible audience in the land. The Government Printing Office was to serve as gateway to that information. And naturally enough, Mayo wanted to carry U.S. Supreme Court Opinions on **THE BOUNDARY LINE** as well - at least those pertaining to real estate.

In fact, GPO DOES operate a BBS for Project Hermes - titled the **Project Hermes BBS** at (202)512-1387. The problem is - you can't call it. Apparently, only the 1400 libraries are allowed access to the system. And Mayo ran into the usual bureaucratic dance at the library as well. His contention is that the GPO has a miserable record as a sysop

The Village Group announces a whole new concept for you, the sysop:

Get paid for your hard work.

If you're a BBS System Operator, you know that providing valuable on-line services takes more than a phone line and a hard disk. Besides the capital expense, it requires time, dedication and energy.

It's easy to get appreciation. Getting paid is another matter. Even if you have a workable billing policy in place, administering it can take more resources than you have available.

If you're going to run a business, give yourself business resources.

An interactive media business is like other media businesses. Look at others in your area. Magazines and radio stations, even the smaller ones, have marketing, billing and accounting staffs that make it possible to reward their owners for their risk and effort. But those resources haven't been available to sysops, both because they're expensive and because providers of business resources often don't understand interactive media.

The Village Group wants to provide what you need to make money from your business. We want to work with you to ensure that your board becomes a vital mainstream local media outlet, just like a magazine or radio station.

The Village Group; think of us as your natural resource for:

- Cost effective marketing
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- Packetnet services and technology
- GUI tools
- fax and voice tools
- Information products (newswires, stock quotes, entertainment features)

If you'd like to learn more, stop by and see us at the Online Networking Exposition and BBS Convention, Booth #35. Or contact us right now!



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Convenience of Payment

What if McDonald's, the hamburger company, had tried to get started this way:

You're out cruising in your '57 Chevy, and an interesting looking new hamburger stand catches your attention. You drive up, and a waitress appears. She asks for your name and password. You have none, so she explains that, in order to buy hamburgers, you must register in advance, and make a minimum payment by credit card or mail. This will entitle you to a certain number of hamburgers per week. Each time you want a hamburger, you simply give your name and password, and the appropriate "hamburger credits" are deducted from your account. When your hamburger account starts to run low, you will be alerted to buy more, or, you can arrange to have your credit card automatically billed.

Would you have bought a single hamburger this way? Would anybody? Yet that is exactly what the online world has asked its customers to do... until now.

Breakthrough Billing Service = BBS

The convenience of cash is taken for granted in everyday business transactions. You want a Coke — you drop a coin in a machine. You go to a movie — you fork over the cash, they hand you a ticket.

Online services can't work that way, because the customer is not physically present at the place of business. It's not that he doesn't want to fork over the cash, or that he considers it too expensive. It's just that the logistics of getting the cash out of his pocket and into yours are too awkward. Credit cards are no good for several reasons:

- Many people may be reluctant to give you their credit card number for fear of hackers
- Many teenagers who use BBS's don't have credit cards
- Banks are highly distrustful of credit-card-over-the-phone types of businesses, which makes it hard to become a "merchant"
- The low dollar amounts per sale make the overhead of filling out slips or phoning for validation a large fraction of revenue

Billing your customers doesn't work either. Many of them will put off paying your bill — but they will feel guilty about it, so they'll put off calling your system until

they get around to paying your bill, but they never get around to paying your bill — and the net result is that you lose both the money and the customer.

The answer is a 976- or 1-900- number. The customer can call an automated voice synthesis machine, which reads off a number to him. He then calls your BBS and punches in the number. Presto! Instant online time! The charges appear as a small additional amount on his phone bill at the end of the month.

Please enter your selection, or X to logout: /G0 976

The following 976-BBS services are available:

G => General Information
R => Redeem a Number
X => Exit to main menu

Select a letter from the above list, or X to exit: G

Welcome to 976-BBS! 976-BBS is a service that allows you to buy credits easily and quickly by making one phone call to 976-SHAE. When you call that number, you will be given a redemption code. Once you have the code, call this system back, enter the code using option 'R' from the 976-BBS menu and you will be posted 21688 credits instantly. If you have any questions or problems with this service, a customer representative can be reached at 583-5998. The charge for calling 976-SHAE is \$4.58 and it will be billed to you by your phone company.

Select a 976-BBS option (G,R,X, or ? for help): R

Please enter your redemption code: 564782189

21688 Paid Credits have just been added to your account.
Thank you for choosing the Isles of Shae.

Alt-Z for Help | ANSI-BBS | 19208-001 FOX | | | Online 01:28

Once a user has called your 976- number, he can dial back into your BBS and redeem his code. On the Isles of Shae, where this software was tested, 976-SHAE became the preferred method of payment almost immediately.

People always pay their phone bills — or they don't have phones. You get paid directly by the phone company, so you don't have the hassle of filling out long deposit slips or chasing down bad checks. And your customers can buy online time from you "on impulse", with no inconvenience or delay. Your own time is freed up, since you don't have to get involved in the day-to-day posting of credits and management of accounts. And best of all, new prospects can give your system a try — as full-fledged paying customers — on their very first call.

Here's How It Works

You'll need a second computer, a 976- or 1-900- number, and the Galacticomm 976-BBS™ package. (We assume you are running The Major BBS® with full source code licenses or you wouldn't be in this business.)

You take the online "module" part of the 976-BBS software and add it to your MAKETSYS file. You install the Talking Technologies Powerline II card (which comes included in our 976-BBS package) in the second comput-

er, along with our voice-configuration software. You use any ordinary telephone handset to "program" the system with your particular header/trailer messages ("Hello, thanks for calling the XYZ BBS credit service..."), the digits in your own voice, and so on.

This second computer doesn't have to be at the same location as your BBS — you don't need them hooked together over a LAN or a dedicated phone line. Instead, the 976-BBS software uses a proprietary, dual-password scheme that allows the voice-server and the online redemption mechanism to generate the same sequence of codes. The security architecture also guarantees that each 976-BBS package will generate its own unique code sequences. And the odds of someone guessing a valid code are less than one in ten million.

At this stage, you will need to determine how much you're going to charge for each call and how many hours of online time a user will get for a valid redemption code. You'll probably want to keep the charge reasonably small (between \$4 and \$8). If you charge too little, your users will get annoyed at having to keep calling the 976- number to get more credits every hour (also, if your phone company gets a certain minimum amount per call, this will cut into your profit margin). If you charge too much, however, people will think twice before picking up the phone.

You should check your local tariffs to make sure your messages contain any necessary disclaimers (e.g., "each call will cost such-and-such plus toll, if any", "if you're under 18 you must get the permission of a parent").

Next, you configure the online module. What's the 976- number users should call? What voice phone number should they call if there's a problem? How much will they be charged for each call? How many credits will they get? You can also configure the number of attempts a user can make to redeem an invalid code before being automatically logged off. Anytime a user is logged off for trying to redeem a false code, a message is generated in the Audit Trail, alerting the Sysop.

Now, plug your 976- line into the back of the Powerline II card and fire up the voice-server software. You'll be able to see calls as they come in, and you can use the arrow keys to scroll through a history of all

976-BBS - ANSWER MODULE - V1.00				
TOTAL CALLS	CALLS TODAY	DATE	TIME	CURRENT STATUS
2871	69	02/03/92	22:05:36	Waiting for call
DAY NO.	TOTAL NO.	TIME	DATE	NUMBER GIVEN
54	2856	18:42:38	02/03/92	578924558
55	2857	18:58:44	02/03/92	557356894
56	2858	18:55:54	02/03/92	414983681
57	2859	19:01:02	02/03/92	845875139
58	2860	19:08:38	02/03/92	854873256
59	2861	19:22:10	02/03/92	896413259
60	2862	19:48:24	02/03/92	545636975
61	2863	19:41:32	02/03/92	512323899
62	2864	19:44:08	02/03/92	698536974
63	2865	19:45:18	02/03/92	181656989
64	2866	19:59:22	02/03/92	548987931
65	2867	20:18:56	02/03/92	964774351
66	2868	20:31:02	02/03/92	636589653
67	2869	20:44:42	02/03/92	536123786
68	2870	20:56:48	02/03/92	897325413
69	2871	21:04:32	02/03/92	884798651

PAGE UP PAGE DOWN TO SCROLL WINDOW, OR ALT-X TO EXIT TO DOS

The 976-BBS server software uses a voice synthesis card to present callers with their redemption codes.

redemption codes given out, each one time and date stamped. Last step: activate your Online Redemption Center and announce to the world your new breakthrough billing service!

Just a Phone Call Away...

Imagine how much easier it will be for a first-time caller to join your BBS:

It's 10 PM. You decide to call a new BBS you've just heard about. You log on and are told that this is a pay-for-play system, but you are invited to try a free demo. You enter the teleconference, and WOW! There's a small group playing poker, a heated debate over the last Superbowl, people hugging each other. Someone whispers a private hello to you, and you get involved in a discussion with someone you knew in school. Suddenly, you get a message that your free demo time is up, but you can call a 976- number to buy another 4 hours of time for \$5. You quickly pick up the phone and give it a call. Two minutes later, you've logged back on, redeemed your code, and returned to your conversation. What a cool system!

Give us a call at 305-583-5990. Soon you can concentrate all your efforts on making your BBS the best it can be. And once a month, deposit those checks from the phone company.

GALACTICOMM

Galacticomm, Inc. 4101 S.W. 47 Ave.
Suite 101, Fort Lauderdale, FL 33314

Modem: (305) 583-7808
Fax: (305) 583-7846
Voice: (305) 583-5990

and worse, won't let anyone access the data except through terminals IN libraries.

Mayo went so far as to request access to the system under the Freedom of Information Act and found out a very interesting thing. According to a letter from Anthony J. Zagami, General Counsel for GPO, Congress, in an all too familiar refrain, added a little bitty exemption to the FOIA law when it passed it - exempting Congress itself from having to comply with it (is this pattern becoming redundant or what?). And the GPO is actually an adjunct of the Congress. So the Government Printing Office, of all government agencies, is actually claiming it is EXEMPT from Freedom of Information requests.

Mayo's point would seem to be that once GPO was the official gateway via this new law, all federal agencies would refer electronic information to GPO, and all electronic data at this gateway would be excluded from FOIA requests - freeing the government to allow access to who they wanted to have it, when they wanted them to have it, at whatever price they wanted to charge - free of the encumbrance of the law of the land regarding access to information. So the GPO WINDO program appears in all likelihood to really be a ploy to get access under one roof - and the right roof - so that citizens wouldn't be so heavily armed in gaining access to it.

Mayo seems pretty serious about it. In May, he prepared a lawsuit for the U.S. District Court for the Northern District of California asking to have the GPO declared subject to the Freedom of Information Act, and if failing in that, to be awarded access to the information anyway under his "common law" rights to information about government.

You may address your comments regarding H.R. 2772 to:

The Honorable Charlie Rose, Chairman, Joint Committee on Printing, United States House of Representatives, Washington, D.C. 20510

The Senate version, S.2813 has been referred to the Senate Rules Committee:

The Honorable Wendell H. Ford, Chairman, Senate Rules Committee, SR-173A RS, Washington, D.C. 20510-1701; (202)224-4343

And finally, you can contact William T. Mayo at The Boundary Line BBS, One Bush Street, 2nd Floor, San Francisco, CA 94104; (415)391-8486 voice; (415)391-5756 fax; (415)398-6171 BBS.

LIGHTNING COMMUNICATIONS PICKS UP COMPUCOM'S CSP PROTOCOL

Recall from our last issue that modem maker CompuCom had folded their tent somewhat suddenly - leaving nearly 20,000 CompuCom modem owners and some 1500 BBSs that had bought in a bit stranded. CompuCom had sold a very low-cost modem (\$149) that transmitted files at 9600 bps using an oddball proprietary scheme called the CompuCom Speed Protocol (CSP). The modem did find a small market among those who wanted to play at speeds higher than 2400 bps, but didn't want to pay the freight the more standard V.32 9600 bps modems required. In the light of the current free-fall in V.32 and even the 14,400 bps V.32bis modem prices, the matter seems increasingly irrelevant.

But Lightning Communications, who actually offers a 14,400 bps V.32bis modem at the bargain price of \$279, has announced implementation of CompuCom's CSP protocol on a PC internal half-card modem at a very attractive \$139 price. The modem will feature V.42/42.bis, 9600 bps send and receive fax, the usual V.22bis for 2400 bps data, and CompuCom's CSP protocol for 9600 bps data. The card will work as COM 1-4 with four IRQ options. Lightning Communications, 36 Argonaut, Suite 150, Alisa Viejo, CA 92656; (714)457-8001 or (800)433-4420 voice; (714)457-9429 V.32 BBS; (714)457-0265 CSP BBS.

INTERNET CD-ROMS

Last month we mentioned several CD-ROMs of interest to the BBS world. It's getting easier to do these things and

more people are getting involved at ever lower prices. Bob Bruce of Walnut Creek California has introduced an entire line of CD-ROMs - most of Internet file site collections - at some very interesting prices:

SIMTEL20 MSDOS CD-ROM - One of the most popular Internet archive systems is SIMTEL20.ARMV.MIL This disc contains about 7500 (500 MB) utilities, programming tools, source code, making up the entire MS-DOS archive of SIMTEL20. Produced January 1992. \$24.95

CICA WINDOWS COLLECTION CD-ROM. Indiana University maintains a collection of programs for Microsoft Windows including utilities, games, bitmaps, fonts, etc. About 80 MB - Created March 1992 - \$24.95

SOURCE CODE CD-ROM. This disc contains Usenet source archives, the Simtel20 Unix-C Archive, and a large collection of MS-DOS source code - totaling about 600 MB of source code files - mostly C but including Pascal, LISP, Fortran, Assembly, etc. Created March 1992 - \$39.95.

OS/2 ARCHIVES CD-ROM. Approximately 2000 OS/2 programs (150 MB) from the novell.com and hobbes.nmsu.edu sites. Created May, 1992 - \$24.95.

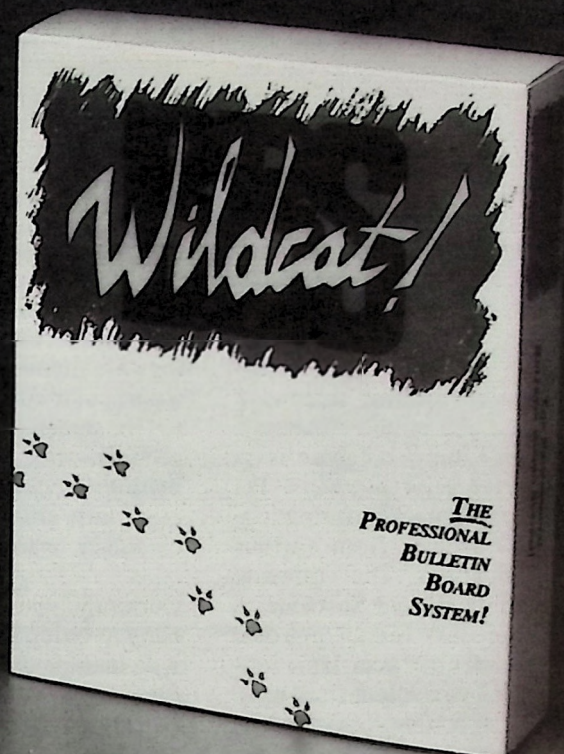
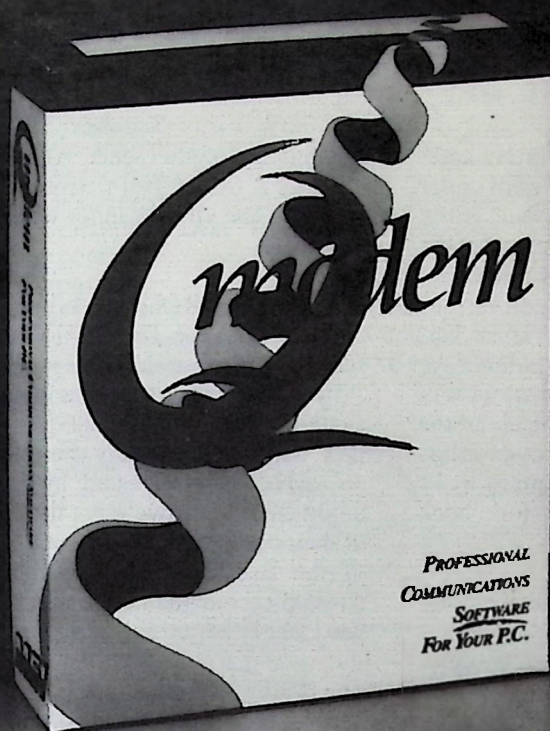
All files are PD/shareware. Add \$5 shipping. MC/Visa ok. Contact Bob Bruce, Walnut Creek CDROM, 1547 Palos Verdes, Suite 260, Walnut Creek CA 94596; (800)786-9907 or (510)947-5996 voice; (510)947-1644 fax.

ZIFFNET TO APPEAR ON PRODIGY SERVICE

Ziff Desktop Information, a division of the Ziff Communications Company, has ported a subset of their popular ZiffNet Information Service to the Prodigy system effective June 4. The new Prodigy "custom" service will comprise a couple of firsts for both companies.

ZiffNet is an online service operated by part of the Ziff Davis publishing conglomerate. Ziff publishes the leading large computer publications including *PC Magazine*, *PC Computing*, *PC*

SOFTWARE TO MAKE YOUR MODEM JUMP THROUGH HOOPS.



Qmodem has been doing just that for the last eight years as the communications software of choice for well over a quarter million pioneering communication enthusiasts worldwide. It was one of the industry's best-kept secrets, and now MSI makes it available in a full commercial package, the first to include an off-line mail reader. File transfers scream at baud rates up to 115,200 using the latest in error-correcting protocols, including Xmodem, Ymodem and Zmodem. Add a script language, 8 of the most popular terminal emulations, a dial-in host mode, context-sensitive help, and the easiest installation in the industry, and you've got the best bargain in a general communication program available today.

Wildcat! is the system of choice when it comes to implementing a Bulletin Board System. Both single and multi-line versions are available, supporting up to 250 incoming phone lines or LAN workstation connections, with bullet-proof security. The message system includes private mail, forwarding, carbon copies and return receipts, with provisions for echomail connections and Netware MHS support. File transfers make use of any protocols desired, including Xmodem, Ymodem, Zmodem, Kermit, and many more, at speeds from 300 to 57,600 baud. The branching questionnaire allows formatted answers for order-taking or polling callers. WILDCAT! supports multi-tasking operation under DESQview as well as specific support for Netware operation.

MSI products available from
Software etc. stores, nationwide or a major software
dealer nearest you.

For more information please contact:
Mustang Software, Inc.
P. O. Box 2264 Bakersfield, CA 93303
Voice: (805) 395-0223 • Fax: (805) 395-0713
BBS: (805) 395-0650



LAN TIMES RATING		
Wildcat!		2.0
Criterion	Weighting	Score
Features	150	Excellent
Security	100	Excellent
Interoperability	100	Good
Performance	150	Excellent
Movability	100	Excellent
Installation and Use	100	Excellent
Documentation and Support	100	Good
Error Handling	100	Good
Overall Score		Excellent

Week, *Computer Shopper* and a dozen or so other titles. Columnists and editorial staff from the various publications actually participate in many of the forums on the service and the full text of selected articles and reviews are available on the service. As a result, ZiffNet probably has the largest compilation of quality editorial matter online. The ZiffNet online service operates on the CompuServe network. CompuServe users can access the system by simply entering **GO ZIFFNET** at any prompt. Non-CompuServe members can subscribe to the service directly and still use the local CompuServe access numbers without having a CompuServe account.

The ZiffNet service provides a pretty complete array of online services including discussion forums, shareware download areas, and online databases. Their Computer Library database is an excellent reference of products, PC product vendor contact information, and over 7000 articles from various computer publications. The company also bought Public Brand Software, a leading shareware disk vendor, in a deal with Bob Ostrander last year. This provides them with an excellent shareware library to make available for download as well.

The most recent addition to ZiffNet is a database titled Ziff Buyers' Market. According to David Shnaider, head of Ziff Communications, Inc., ZiffNet offers a wealth of product comparisons, editorial product reviews, and other data from the Ziff publications to help callers determine what particular product they want to buy. With the addition of Ziff Buyer's Market, they can now find out where to actually buy it at the least possible cost.

The Buyers' Market consists of a database of over 10,000 products from 130 different mail order companies in a searchable database callers can use for comparison shopping. ZiffNet members can reach it with the command **GO ZNT:MARKET** and CompuServe members can get there with **GO BUY-MARKET**.

The database is arranged by product category under such headings as:

1. What's New
2. Computer Systems
3. Storage Devices
4. Printers
5. Monitors
6. Modems
7. Input Devices
8. Boards and Components
9. Other Peripherals
10. Software
11. Vendor Directory.

Submenus breakdown into further categories. We checked SCANNERS under Input Devices and 9600 Modems under Modems for example. In each case, the resulting listing of products numbered well over a hundred entries with various models, prices, and features. These listings are numbered. Enter a number for a particular entry, and the result is four to five screens of information about the product, price, company contact information, credit card and shipping policies, any shipping delays for check clearance, warranty, etc.

Currently, you then telephone the company to order. But future enhancements will include an option to fax an order directly to the company from the database.

As such, ZiffNet Buyers' Market comprises the largest and most comprehensive database of products available from mail order vendors across the country. The list of over 10,000 products is almost overpowering. One inconvenience we noted, for example, was that to get the detail sheet on a product, you were forced to enter the number while that entry was still on the screen. We were naturally inclined to review briefly all 135 entries and write down the five or so of interest. You must go back to the beginning and cycle through the screens until that entry appears to enter the number and retrieve the detail sheet listing the vendor and features.

The company planned on announcing an alliance with Prodigy Services Company this June 4 allowing Prodigy callers to access a subset of the ZiffNet service as a "custom" service. This has a couple of interesting implications. First, it will be the first "hourly" charge on the Prodigy service. Callers will pay \$14.95 per month for access to the service and that includes three hours of con-

nect time. Additional time is charged at \$6.00 hourly in one minute increments.

The Prodigy version does NOT provide all the ZiffNet services such as editorial discussion forums, the Buyer's Market, the Computer Library, etc. But it does contain selected editorial text, product reviews, and most notably - shareware downloads. Earlier this year, Prodigy experimented with a download of Symantec's Virus Scanner during the Michelangelo virus scare. According to Prodigy's Steve Hein, over 100,000 copies of the virus scanner were downloaded.

"ZiffNet for PRODIGY brings a new dimension to the PRODIGY service," said Prodigy President Ross Glatzer. "The timely information and software available through ZiffNet for PRODIGY will help our many members who are especially interested in computer hardware and software get the most out of their computers. Downloading is one of the features most frequently requested by our members, and so we're particularly happy to be able to offer it."

The Prodigy Terminal program does actually have a function for downloading programs. And ZiffNet has developed a program titled ZiffNet Download Manager that allows Prodigy members to download programs, unzip them, and store them, all at the click of a mouse. According to Ziff Communications head David Shnaider, this will be the easiest to use download function ever created.

Prodigy, increasingly the first stop for callers joining the online world for the first time, will then allow callers to download files without any knowledge of ZIP programs or other esoterica. The library will initially carry slightly over 2000 titles in 16 categories.

The ZiffNet for PRODIGY service will also carry news and commentary from PC Week, PC Magazine, PC Computing, and PC Sources with stories on hardware, software, technology, company news, along with some of the editorial columns. Buying Advice and Technical Advice areas also provide tips for users. A bulletin board allows members to discuss issues and pose questions to ZiffNet. The bulletin board is organized under the following topics:

BULLETIN BOARD OPERATOR DISCOUNT PROGRAMS V.32 and V.32bis Modems

VENDOR	MODEL	LIST	SYSOP	BBS	VOICE	FAX
ATI Technologies	ATI V.32	\$699	\$350	416-756-4591	416-756-0718	None
Cardinal Technologies	9600V42 V.32	\$699	\$269	717-293-3074	717-293-3000	None
Computer Peripherals	Viva 9624e V.32	\$349	\$249	805-499-9646	805-499-5751	805-498-8306
Galaxy Networks	UFO V.32bis	\$999	\$299	None	818-998-7851	818-998-1758
GVC Technologies	FM-9696/144V V.32bis	\$689	\$413	201-579-2380	201-579-3630	201-579-2702
GVC Technologies	SM-96V V.32	\$599	\$329	201-579-2380	201-579-3630	201-579-2702
Hayes Microcomputer	Ultra 144 V.32bis	\$1199	\$599	404-446-6336	404-840-9200	404-449-0087
Hayes Microcomputer	Ultra 96 V.32	\$999	\$399	404-446-6336	404-840-9200	404-449-0087
Hayes Microcomputer	ISDN System Adapter	\$1599	\$799	404-446-6336	404-840-9200	404-449-0087
Image Communications	Twincomm 9600 V.32	\$299	\$279	None	201-935-8880	201-935-6548
Intel Corporation	14.4EX V.32bis	\$699	\$399	503-645-6275	503-629-7000	503-228-9707
Intel Corporation	9600EX V.32	\$599	\$299	503-645-6275	503-629-7000	503-228-9707
Multi-Tech Systems	MT932BA V.32	\$869	\$435	612-785-9875	612-785-3500	612-785-9874
Multi-Tech Systems	MT1432BA V.32bis	\$899	\$450	612-785-9875	612-785-3500	612-785-9874
Practical Peripherals	PM14400FXSA V.32bis	\$549	\$250	818-706-2467	818-706-0333	818-706-2474
Supra Corporation	SupraFAX V.32bis	\$399	\$249	503-967-2444	503-967-2400	503-967-2401
Supra Corporation	SupraFAX V.32	\$299	\$199	503-967-2444	503-967-2400	503-967-2401
Telebit Corporation	T3000 V.32bis	\$949	\$399	None	408-734-4333	408-734-3333
U.S. Robotics	HST/DS V.32bis	\$1295	\$499	708-982-5092	708-982-5010	None
Ven-Tel	EC96 V.32	\$699	\$439	408-922-0988	408-436-7400	408-436-7451
ZyXEL	U-1496E V.32bis	\$695	\$370	714-693-0762	714-693-0804	714-693-0705

This Week's News
Buying Hardware
Buying Software
Downloading
Tips & Tricks
Home Office
Personal Finance
Games
Water Cooler

Ziff Communications Company, 25
First Street, Cambridge, MA 02141;
(617)252-5000 voice; (617)252-5551
fax; (800)666-0330 logon directions.

AMERICA ONLINE JOINS INTERNET

American Online subscribers can now communicate with millions of people worldwide at no extra charge via an Internet electronic mail gateway announced June 3rd.

"We're pleased to announce the availability of this international e-mail gateway," said Stephn M. Case, president. "We've married the ease of use and affordability of America Online with the power and reach of the Internet system.

With a single subscription to American Online, people can now communicate with friends, relatives and business associates throughout the world. This brings our concept of electronic community to a new height."

America Online's Internet domain address is **aol.com**. Internet users who would like to request a free America Online software kit and set up an account, or get more information about America Online, can send an e-mail message to **info@aol.com**. Or, they can call (800)-827-6364.

America Online offers some unique features. They are not particularly affiliated with any larger company, as GENie, CompuServe, and Prodigy are. To use the service, you must use their proprietary terminal software, which is graphically icon based somewhat after the fashion of the Macintosh interface.

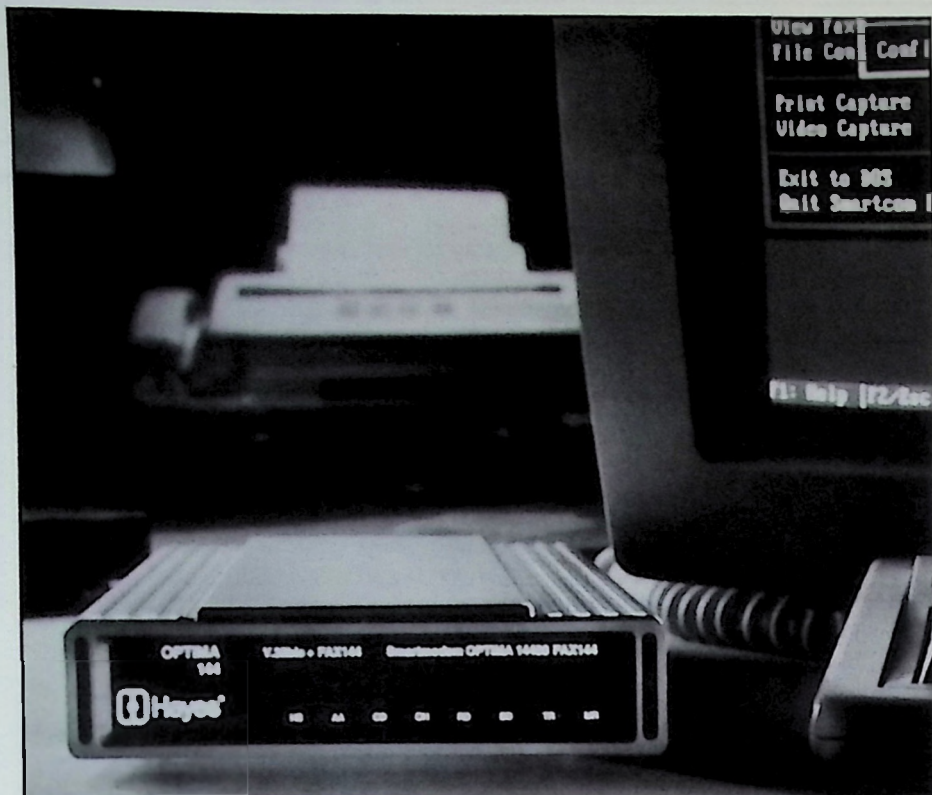
The Internet gateway is quite carefully integrated into the normal AOL interface, such that subscribers reply to Internet messages just as they would to local message traffic - by simply clicking on the **REPLY** icon with their mouse.

Founded in 1985, the company went public in March 1992 under the NASDAQ symbol **AMER**. America Online Incorporated, 8619 Westwood Center Drive, Vienna, VA 22182; (703)448-8700.

HAYES INTROS OPTIMA 144 DATA + FAX MODEM

Hayes Microcomputer Products announced the **Hayes OPTIMA 144 + FAX144**, a data plus fax modem supporting CCITT (Consultative Committee on International Telegraphy and Telephony, part of the International Telecommunications Union) V.32bis data connections at 14,400 bits per second (bps) with V.42bis error correction/compression function. The modem also supports CCITT Group 3 fax standard V.17 for 14,400 bps fax transmissions. The fax responds to the Asynchronous Facsimile DCE Command Set commonly known as Class 2 Command Set making it compatible with most commonly used fax software programs.

The new model will be available at an estimated retail price of \$519 and comes with Smartcom FAX software



Hayes Optima 144 FAX Modem - \$519.

for fax transmissions and Smartcom EZ for data communications. The Smartcom FAX program is a terminate-and-stay-resident (TSR) program allowing users to fax documents from their PCs as well as receive faxes in the background and then view, rotate, flip, print, or save faxes to disk.

Hayes has also announced the Hayes OPTIMA 144 - a data only model at \$479.

"Sending or receiving fax messages around the world without leaving your computer is no longer just another convenience in businesses today - for many applications it is an essential part of communications," said Hayes President Dennis C. Hayes. "Now no matter what your needs are, you have everything in one modem - asynchronous or synchronous data communications as well as fax capabilities. With OPTIMA 144 you the advantage of additional cost savings for the highest standardized speed available for PC modem communications."

The products carry a two year limited performance warranty. But if you register your purchase within 90 days by mail or by calling their Online With

Hayes bulletin board at 800/USHAYES, the company will extend the warranty to five years at no additional charge. Hayes Microcomputer Products, Inc., PO Box 105203, Atlanta, GA 30348; (404)441-1617 voice; (404)441-1238; (404)729-6525 BBS.

NEW PC PERIPHERAL - PET FEEDER DISH HOME AUTOMATION CATALOG

From the early days of personal computer development, one of the oft quoted uses for the hardware was to develop "smart" homes. Some science fiction accounts of these homes of the future had it watched over by an omnipotent computer butler who played your favorite music, served as watchdog, made your drinks, adjusted the lights, and did the dishes.

The PCs are now overkill for such tasks, but most users have developed the PC as an office machine, communications terminal, and data storage cedar chest. Few are using it to turn lamps on and

off. Still, for the gadget enthralled, there are a few products out there. Most notable is the X-10 device. X-10 is a defacto standard specifically for turning lamps on and off. And the devices are really pretty cunning. Controllers transmit signals over the AC wiring riding on top of the 60Hz power wave. Individual slave units are plugged into this 60Hz LAN and can receive commands from the controller to turn lights on, shut them off, etc.

A group titled Home Automation Laboratories (HAL) has a complete system for the PC called DYNASTY. Dynasty is a software program with a set of interface components allowing your PC to control everything. The software allows you to program events such as TURN ON TV that also cause kitchen lights to go out, overhead lights to go to 40% illumination, lamps to 60%, and start the corn popper. The magic of course is in the variety of modules you can get to enhance your home automation system. And HAL publishes a catalog of hundreds of little gadgets. They offer speech input and output devices, an amazing array of weather sensor devices, temperature sensors, flood sensors, etc.

Several caught our eye. There is one \$69 device you can dial from any touch tone phone and turn on or off any of eight devices using touch tone codes. In this way, you can call home from your cellular phone and have the hot tub fire up before you get there. More likely, you can call home and have it reset your BBS. Another device will monitor the house for sound, temperature, or other input and dial OUT to you if certain conditions occur.

Another device is a fan you place over the ventilation registers and plug into the wall. You can outfit several rooms with these as well as temperature sensors and allow your computer to turn these individual units off and on to even out the temperature throughout your home. One interface unit allows your PC to transmit infrared control signals to the VCR, TV, and stereo.

Some of the devices fall into the "you've got to be kidding" category. An electronic watering system for houseplants? It's called the Desert Rain Low Pressure Watering System and you can



FREEDOM without THE PRESS

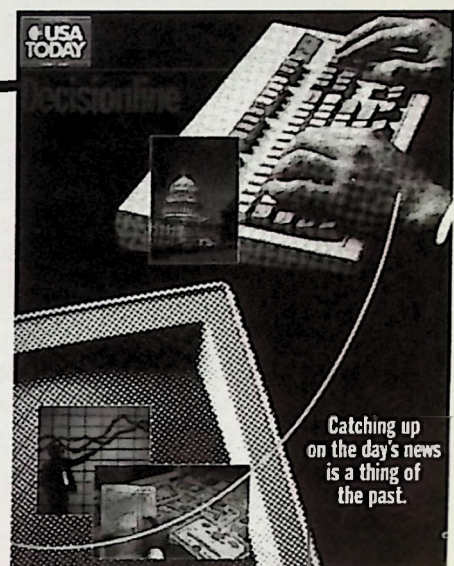
You operate the very best electronic bulletin board system you possibly can. And you try to provide your callers with the best entertainment, news, software, and technical information you can find. We're here to help with online information products you can use for your callers benefit. And that means increased paid subscriptions to your system.

USA TODAY Decisionline

Published by Gannett New Media each business day, USA TODAY Decisionline provides a remarkably concise, readable, online morning summary of the events of the day for your callers. Averaging 60 KB each morning in .ZIP, .ARJ, .ARC, or .LZH archived format, USA Today Decisionlines provides news on eighteen topical categories.

You can place the news gleaned from Gannett publication's journalists at the keyboard of your callers each AM. Available by 5:00 AM Mountain Time each Business day, USATODAY can be downloaded from our multiline information service or file requested from our multiline mail system using your U.S. Robotics HST 9600 bps or V.32 modem at 9600 bps or higher - normally less than a one minute connection. And maintenance of this product is so simple to automate, you don't even need to get out of bed. Best of all, USA TODAY needs no introduction or explanation. It has the name recognition to instantly draw new callers to your system. Put THE most popular daily national newspaper in the world on your electronic bulletin board for as little as \$25 per month.

- Advertising
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BOARDWATCH

GUIDE TO THE WORLD OF ONLINE SERVICES MAGAZINE

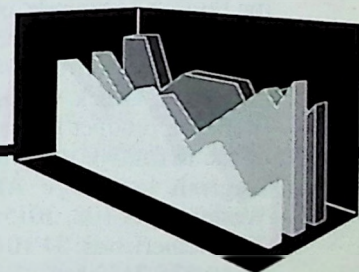


BOARDWATCH Online Edition

While the online information services industry is broadening daily, the number one topic of interest to most callers is still how to put their modem into play for maximum benefit. And since March 1987, Boardwatch Magazine has been the best way to do it. Now, we've introduced an Online Edition specifically for display on your information service. Boardwatch lists product support systems, free government database services, and selected bulletin boards of note from all over the world. Boardwatch places the same information you now hold in your hands - the best information the online world has to offer each month - up on your caller's screen. Get the definitive publication for the online world for your system. Boardwatch is available at a quarterly rate of \$75 or an annual rate of \$250.

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Nearly 2,000 closing NYSE stocks, high/low/close available within minutes after market close in a tiny 30K file for as little as \$25 monthly.



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To see these products in action, call our Boardwatch Online Information Service at:

(303) 973-4222 (USR HST Dual Standard V.32)

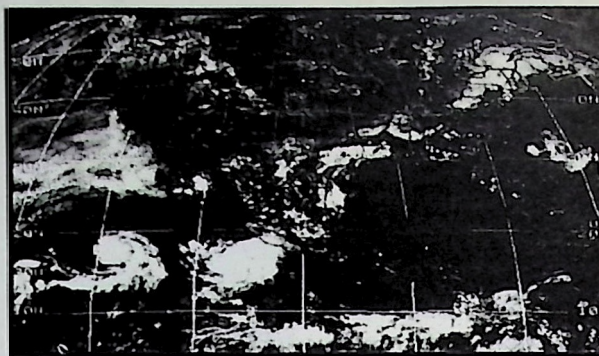
control it by PC. An electronic feeding system for dogs and cats? It's called Mr. Pet and it can respond to X-10 commands from your PC. Don't have a pet? They can fix you there too with a radar watchdog that barks when it detects approaching people and becomes furious if they come too close. A motorized drapery opener can open and close the curtains. This little catalog will keep the gadget guys going for days. The catalog is free. Home Automation Laboratories, 5500 Highlands Pkwy, Suite 450, Smyrna GA 30082; (404)319-6000 voice; (404)438-2835 fax.

NEW GRAPHICS CARD - 16.7 MILLION COLORS ON SCREEN

Number Nine Computing of Lexington Massachusetts has introduced a graphics board based on the Texas Instruments TMS34020 graphics coprocessor chip supporting 16.7 million colors at a resolution of 1024 X 768 pixels or 65,000 colors in a resolution of 2048 X 1024. The board, titled #9GXITC, comes with 4 MB of video RAM and sports a yankee-proud price of \$2295. Contact Number Nine at (617)674-0009.

OXFORD ENGLISH DICTIONARY CD-ROM

AND Software of Rotterdam, The Netherlands will introduce the entire 22 volume set of the Oxford English Dictionary on CD-ROM this summer. After lengthy negotiations with Oxford University Press, AND Software has developed software using Microsoft Windows to access the dictionary. According to company officials, most such reference works ported to CD-ROM have been subsets of the printed version. But this OED on CD-ROM will not only contain the entire Oxford Dictionary of the English Language, but the advanced software allows searches for etymologies, variant forms, citations, phrases, phonetics, Greek words and more. As such, the product is actually a superset of the definitive reference work on the English language AND Software, Westersingel 108, 3015 LD Rotterdam, The Netherlands; 31 10 436 7100 voice; 31 10 436 7110 fax.



Centrally Located on Planet Earth

Online since 1982, Nautilus Commercial Data now offers 250,000 public domain files and 200 incoming lines. We support 38,400 baud throughput, with 14,400 baud CCITT V.42bis compatibility. Our corporate files server supports 28 Gigabytes of on-line storage, complete with HOURLY U.S. and WORLD News updates, and multiple daily Satellite Weather Images of Earth. (No charge to examine system!) With THOUSANDS of GIF images, dBASE files, 1-2-3 Templates, Word Processors, Clip Art, Telecom packages, and GAMES, we're your 1-Stop Get-It-All-Here system.

- VISA/MC/OPTIMA/AMEX Accepted -

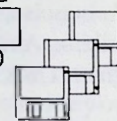
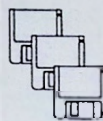
Data: (316) 365-7631

(8,N,I - IBM/ANSI/Color Supported)

Nautilus Commercial Data System

P.O. Box #645 / Iola, KS 66749

Voice Mail/FAX: (316) 365-7559



CORELDRAW 3.0 RELEASE

Corel Systems Corporation will release version 3.0 of their popular CorelDraw graphics package during the first week in June. The new version includes CorelShow, CorelChart, and Corel-Photo-Paint modules, the latter based on the acquisition of the PhotoFinish image editing package from ZSoft Corp. This will give CorelDraw a color photo import/edit capability similar to Adobe PhotoStyler. The new version is priced at \$595 - a price drop of \$100 - and registered owners of CorelDraw can upgrade for \$149. Corel Systems Corporation, 1600 Carling Ave., Ottawa, Ontario Canada K1Z 8R7; (613)728-8200 voice; (613)728-9790 fax.

WILDCAT! DIGIVERSION - NEW MULTILINE WILDCAT BBS SOFTWARE RELEASE?

BBS software development has been dancing around a basic limitation for several years now. The original basic BBS model was that with a PC, a modem, and a telephone line. But if a BBS is successful, you must add more in-

coming telephone lines to handle the calls. The question of how you do that has been a bit perplexing.

There have been two basic models - multiline BBS software and multinode BBS software. Multiline BBS software includes such products as Major BBS, DLX, The Bread Board System, and Oracomm. These products use serial cards from Digiboard, Stargate, etc. to service multiple telephone lines from a single powerful PC. The Digiboard card provides the PC with 4, 8, or 16 serial ports per card and you can gang up to four cards together in a single PC. In this way, up to 64 telephone lines can be served from a single PC. These programs use their own internal proprietary multitaskers to share the machines resources among the serial ports. Some do so more efficiently than others, but in general it works. The drawback is that the multitaskers only work reliably with the rest of the software shelled around it. As a result, they do NOT let you run other external programs.

Multinode software DOES let you shell out to other programs - usually termed DOORS. This makes multinode software largely extensible - you can write a little widget program to do some specific function and patch it onto the BBS host software as a door. When a caller

selects that menu option, the BBS software shells out and hands off control to the door program. Some systems have carried this as far as running dBASE, Oracle, and other application programs as part of their BBS. Multi-node software is pretty much restricted to a single PC handling a single line. But it is Local Area Network (LAN) aware and can share the user database, message database, and file areas across a LAN. No matter what line you dial into, or what PC you are on, if the user database recognizes you, and the message base is accessible under a single account, and you have access to the same file areas, you are in effect on the same bulletin board.

The Multi-node model then is more flexible, but a twenty line system generally requires 20 node PCs, a file server PC, LAN cards, LAN cabling and LAN operating software. Many pay bulletin boards also follow this model, but the economics of purchasing a PC and LAN card for each additional line are a bit gruesome. Worse, with the rapid decrease in price and continuing technical improvement in PCs, within just a year or so, you've watched a ROOMFUL of PCs depreciate before your eyes - they are now the old slow models and not worth a fraction of original cost. Some of the more exotic winners in the BBS world, such as Channel 1, Canada Remote Systems, and Rusty & Edies, are running 100+ line systems in rooms stacked floor to ceiling with PCs. To keep up a LAN with that number of personal computers is a full time job maintenance wise.

There is a third option, it just hasn't quite happened yet. If you could run a MULTILINE BBS that would handle 8-12 lines on a single PC, and then could gang these together on a LAN in modular fashion - then 100 lines could be done on a dozen machines. This is the fascination with OS/2. It would serve as a multitasking operating system. And there is a lot of interest in OS/2 in the BBS community. But so far, OS/2 version 2.0 has a lot of problems with the LAN products the BBS community is accustomed to using.

The tantalizer has been a program titled DESQview by Quarterdeck systems. It provides a multitasker for PCs. Since it isn't actually a widely accepted operat-

ing system, there are some problems. Running some programs in combination with other programs can cause problems. And there is still the problem of serial ports. The IBM PC comes with TWO and the industry has by convention developed FOUR sharing TWO hardware interrupts or IRQs. This doesn't work for bulletin boards. Nonetheless, many small systems run two or three lines on a single PC under DESQview. But the concept seems to break down in the 4-5 line range and we've found no large or even medium sized systems going this route. In general, the complexity of running DESQview and LANs has been a bit daunting. Most operators who have tried have wound up abandoning the concept at some point due to complexity and reliability.

Mustang Software Inc. of Bakersfield, California is rumored to be about to announce a multiline version of their Wildcat BBS software. The current Wildcat will now run multi-node via a LAN. But the company is apparently about to release a \$699 version titled Wildcat! DigiVersion that uses Digi-

board's smart multiport serial break out cards to serve eight lines on an 80386 system under Quarterdeck's DESQview multitasking program. It's a package specifically designed for use with DESQview and the Digiboard serial card and they've been working on the product for nearly a year. As such, MSI has taken on the task of designing a total package that should reduce the complexity and problems the system operators have faced alone in trying to engineer such a solution in the past.

The Digiboard smart cards are actually computers themselves. In addition to providing eight serial ports, they also provide an 80186 microprocessor that handles the low level tasks of transferring files and data in/out the serial ports. The only drawback is that software has to be specifically designed to call the low level routines on this "co-processor" card. The advantage of course is performance. Once a task is "handed off" to the serial card, it poses no further load on the host computer.



Jim Harrer of MSI - Rewiring Wildcat!BBS.

The new version of Wildcat! is specifically designed to work with these cards. It will look and operate just like the existing Wildcat! with the exception that generic doors will not work unless they too are designed to use the Digi-board. Most Wildcat! specific doors are being recompiled to use the Digiboard universal comm port drivers and apparently, the revision is pretty trivial.

According to insiders who've seen the system in testing, by offloading most of the I/O to Digiboard's "smart" serial cards that provide their own 80186 co-processor, the new version operates eight telephone lines quite solidly under the DESQview multitasking software. Additionally, the systems may be LANned together allowing LAN users to logon as well. In this way, you can actually string a line of three or four 386 boxes on a local area network, with each box serving 8 lines for a total of 24, 32, or more lines. The company is also rumored to be experimenting with Digiboard's 16-port cards on 80486 machines.

The \$699 DigiVersion is pretty much unlimited. You buy the package and you can run up to 250 nodes on a single LAN in whatever combination you like.

For the curious of modem, the company has converted their 19-line support BBS to run with the DigiVersion at (805)395-0650. Mustang head Jim Harrer claims that the BBS industry is maturing and his software customers are demanding product support. He's making some convincing moves to give it to them. The company just finished a support RoundTable on the GENie online service, and Harrer claims they've tripled the number of voice telephone support personnel at Mustang. Mustang can also be found on the PCVENA forum on CompuServe, and a MUSTANG support area on America Online.

They've also created their own network using the .QWK type message readers titled MSI SupportNET. It's composed of four conferences: MSI Qmodem, MSI Wildcat!, MSI OLX/SLMR and MSI Off Topic. Any BBS operator who wants to carry these conferences can do so at no charge and systems in the UK, France, Italy, Finland, Norway, Sweden, Denmark, and Australia have all picked up on it. Further, it is cross-con-

nected to conferences on the popular RelayNet International Message Exchange (RIME) network that now claims some 3000 BBSs.

According to Harrer, "I don't believe there is any software company offering a wider-range of support options to its customers. We've covered support from as many angles as possible and I don't think our customers would have expected MSI to do anything less." Mustang Software Inc., PO Box 2264, Bakersfield, CA 93303; (805)395-0223 voice; (805)395-0650 BBS; (805)395-0713 fax.

ANS CO+RE AND CIX AGREE TO INTERCONNECT

The two largest network service providers on the Internet, ANS CO+RE Systems, Inc., (ANS) and the Commercial Internet Exchange (CIX) announced June 8th that they will interconnect their networks for a provisional period in order to increase connectivity among their clients and members. During this period they will continue to work together on technical issues and equitable arrangements that could lead to a permanent interconnection.

ANS, a joint venture of IBM and MCI, is currently under contract from MERIT to operate the National Science Foundation Network - the backbone of the Internet. ANS CO+RE is a commercial subsidiary of ANS set up to sell commercial networking services. CIX is a group of seven other network providers who joined together to establish a commercial network free of the Acceptable Use Policy restrictions forbidding commercial use of the Internet. In recent months, the two organizations have been in a fierce battle over who gets to sell what to whom. This interconnection agreement marks the first notable attempt at cooperation between the two groups.

ANS operates a high-speed, nationwide data network (ANSnet) supporting research, education and business. The ANSnet interconnects with 17 other networks that carry commercial data, as well as data related to research and education. The CIX is an association of seven networks that carry commercial

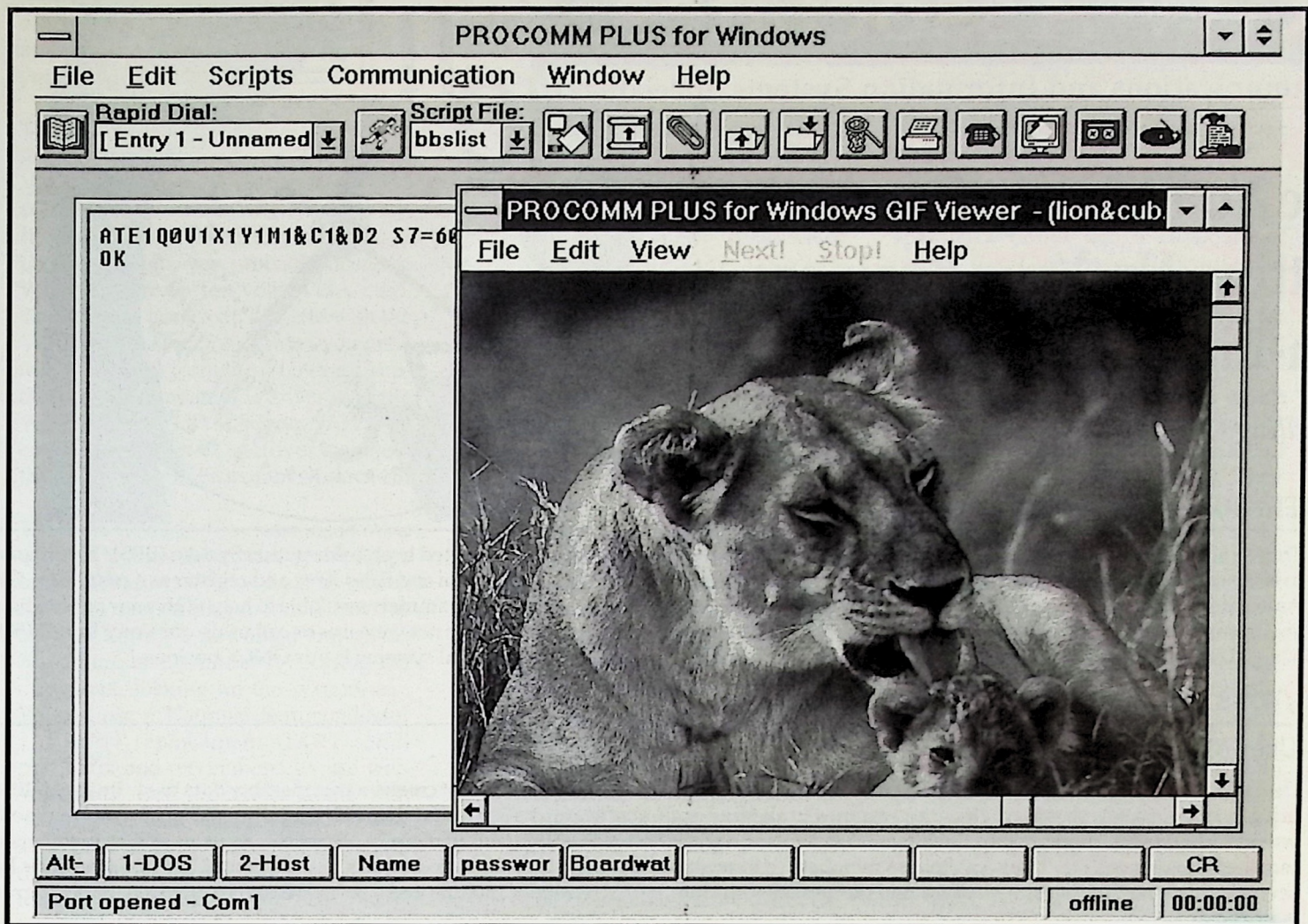
traffic. By signing an agreement with ANS and by joining the CIX, midlevel networks will be able to exchange commercial traffic with other CIX members via the ANS network. ANS is not becoming a member of the CIX at this time.

During the provisional period of interconnectivity, the CIX and ANS will co-sponsor a workshop, which will include other commercial networking service providers, to develop a framework conducive to the rapid expansion of the Commercial Internet. Among the issues to be addressed in the workshop sessions are the potential methods for permanently interconnecting network service providers and for managing all related issues associated with interconnection. Both ANS and the CIX have agreed to forego any cross payments during the provisional period.

In commenting on the agreement, ANS President and CEO Al Weis stated, "The CIX and ANS have taken a step forward in addressing some of the challenges that face our industry. Providing a means for CIX members and ANS clients to exchange commercial traffic has been an important issue to the networking community. Today's announcement is the result of negotiations that include input from many members of this community, especially the New England Academic and Research Network (NEARnet), whose ideas were instrumental in bringing about the final agreement. I am hopeful that our efforts will help broaden interconnectivity and begin to establish a framework for the evolution of the Commercial Internet."

Mitch Kapur, Chairman of the CIX, said, "In taking this significant step, we enable greater freedom from content restrictions on the Internet. This agreement stands as an example that the private sector can achieve the important goal of strengthening the openness of our nation's information and communications infrastructure on a cooperative basis, without the necessity of government regulation."

Susan Eldred (ANS), (914)789-5339, eldred@ans.net
Mitch Kapur (CIX), (617)864-1550, mkapur@eff.org



PROCOMM PLUS FOR WINDOWS

One of the most popular communications program in the PC world is titled Procomm. It began life as a shareware program in 1986 with three guys in San Francisco - Tom Smith, Bruce Barkelew, and Stephen Monaco. It caught on and become one of the great shareware success stories. The three formed a company, originally PIL Software Systems and later DataStorm Technologies, Inc., and moved it to Columbia Missouri, a University town in north central Missouri. Today, DataStorm sports over 100 employees in nearly 50,000 square feet of office space and Procomm Plus is now a commercial software program - arguably the top selling terminal communications program on the shelf.

The company released a new version at the end of May titled Procomm Plus for Windows. It's the first Windows terminal program we've found that actually works. And while we're just now getting the Windows religion, this terminal program is really quite good.

The program features a number of new items we found attractive. Installation is easy enough it does not bear comment beyond the fact that the latest Procomm requires some 2 MB of hard disk real estate. It is completely and totally a Windows application. The entire interface has been redone in Windows style. A toolbar across the top of the screen provides a wealth of cutesy little icons for Windows aficionados to click themselves into a frenzy over. A little telephone, for example, has the receiver lifted if you are online, and back in place when offline. A little book accesses the dialing directory. A scroll icon trips the scrollback function, allowing you to review everything that has crossed the port since your connec-

tion. This function has actually been improved to accurately display ANSI sequences as they were received.

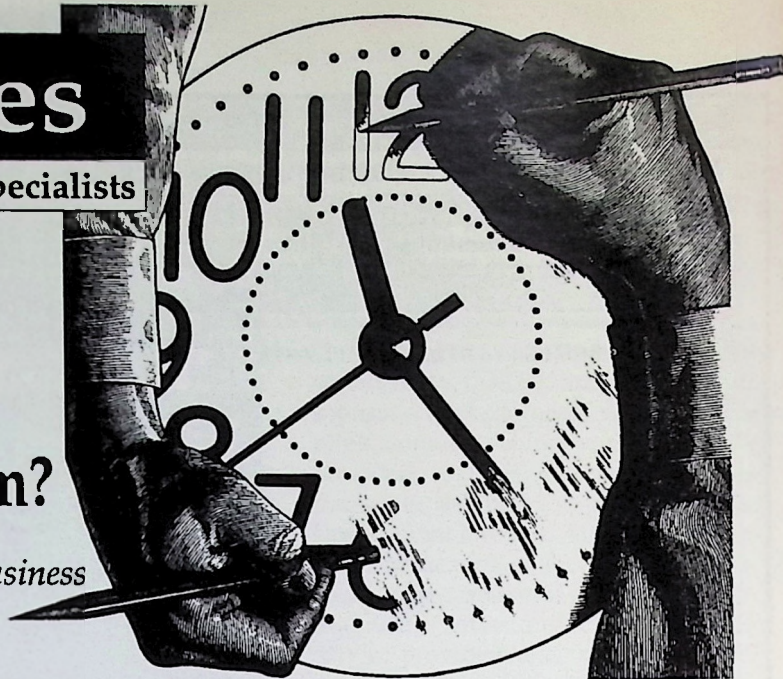
The most attractive new feature is an integrated GIF image viewer. CompuServe's Graphics Interchange Format (GIF) has become a standard online for transferring color photographic bit images and the addition of this viewer in Procomm reinforces that standard. With this new release of Procomm, any time you download a GIF image, a window pops up and displays the graphic image as it transfers. You can move and size this window easily, and as the graphic downloads it slowly paints the image on screen, much after the fashion of the SHOWGIF utility we've reviewed in Boardwatch in an earlier issue. In this way, you can actually view the CIS weather maps while they make the trip from CompuServe to your computer. You can also use it to view images later, and it will allow you to save the image as a Windows .BMP. In this way, your most recent download

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There's a lot available for the TBBS/TDBS System Operator, as well as for anyone interested in an Information System (BBS). If you want to learn more about TBBS/TDBS just call our system and look through Our Demonstration and Sales Area and register as a customer. GW Associates offers full support to all System Operators and we have several excellent programmers available to help with your applications and customization. Please call our system at (508) 429-1784 (N,8,1) and keep up with our new releases or call us on our voice line at (508) 429-6227 if we can help you in any way. Installing and remotely supporting commercial systems is our ONLY business!

TBBS/TDBS SYSTEM ENHANCEMENT SOFTWARE

User Manager

User Manager for TDBS systems is a full membership registration and tracking system that creates a true member data base. Its capabilities include keyword search and on-line user resumes to allow users to share information about themselves, a note pad to let you keep notes on individual users, membership tracking and expiration date notification, automatic changes in user access as users join as members or memberships expire, etc. Users can join as members or renew their membership using credit cards on-line. And User Manager now has several additional modules, such as a small on-line sales module, a user reminder module and a software update module. The program is priced at \$69.95.

User Manager - Software Module

An all new program that works with the User Manager to automate the updates of software to customers. You enter the user registration of software sales and any time you upload a new version of the software it will automatically present the updates to customers registered for that software package and give them the prompt to download it. This package also tracks all sales and prints reports on sale by customer or by software package, and by whatever time period you specify. Designed to reduce or eliminate the time and expense invested in updating software by mail. Please call for more information and price.

Sales Manager

The powerful and productive On-Line Sales Manager. This on-line catalog sales program is written by Jeff Johnson, another pioneer in TDBS software, and it easily shows the power and capabilities of TBBS and TDBS. The Sales Manager will display a catalog of items for sale under categories you specify, each item can have a full descriptive text file attached to it and the user can place an order at any time and continue to browse through the catalog. When done the user selects to order and is presented with each item and given the opportunity to indicate how many are to be shipped. Developed as a modular package this software will handle everything from a low level order entry system to a fully featured point-of-sale package and do all the things you would expect of a full sales package. Please come and work with it on-line. This program is priced at only \$395.00.

Connex - The Connection Exchange

Connex is a professionally-based biographical, friendship, and matchmaking program designed to be used with TBBS and the TDBS option module. It allows members of your BBS to enter their own unique personal attributes, personality profile, and free-form interview. Upon completion of the user's profile and interview, Connex allows the user to make detailed selections, based on the user's own preferences. Over 350 man-hours in research and production, based on such works as Freud, Jung, and other psychological professionals, were required to create Connex and it is the most comprehensive software of its type available. Connex is complete with three databases, a biblical quote database, a gay oriented quote database or the original database. This program is priced at \$139.95.

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of a girlie image can be converted to use as your Windows desktop wallpaper if you feel you must.

The GIF viewer is dependent on the screen driver for windows. The normal VGA driver does not support the 256 colors the GIF viewer will try to display. If the GIF viewer seems to work in bizarre fashion, you probably need the Windows driver for your VGA card. This usually comes on diskette with the VGA card and in some cases you need to download it from the VGA card vendor. You can update this driver with the Windows SETUP function. With the correct Windows VGA driver installed, the GIF viewer in Procomm works well.

The best news is file downloads. You can really download files at 14.4kbps under Windows 3.1 without a stutter. And you can shrink Procomm down to an icon during a download and go do something else without it aborting the download, locking up the system, etc. We did use a National Semiconductor 16550AN replacement UART serial port chip, and recommend its use with Windows. But Procomm is the first package we have consistently and reliably been able to perform high-speed downloads in the background without intermittent problems. We can consistently perform 1600 cps downloads with this program.

The ZMODEM file transfer protocol does have a little idiosyncrasy. You can set the ZMODEM function for crash recovery or overwrite - but not both. Crash recovery is handy if you lose the connection in the middle of a long file download. You simply dial back in, download the same file again, and the download resumes at the spot where it left off instead of starting all over again. The overwrite function allows you to download a file of the same name and it will overwrite the existing file on your hard disk. True ZMODEM actually compares the file dates of the existing file and the file to be downloaded. If they are the same, it aborts the download and if they are different, it overwrites them. If it is a partial file, it completes it. Procomm doesn't actually do this correctly. If you have overwrite set, it overwrites it no matter what and you can't do crash recovery. If crash

recovery is set, it will simply abort the download process if the file names are the same.

Where does this cause problems? Let's say you retrieve a file from a BBS that is updated each day, but carries the same filename so you can easily automate the process of getting it. On Boardwatch BBS for example, the **USATODAY.ZIP** file always has the same name, but each day it carries a new issue of the USA Today newspaper in electronic form. If you have crash recovery set, Procomm won't download the new issue under the **USATODAY.ZIP** name if it already has one from yesterday.

Another feature we found thoroughly charming was metakeys. Metakeys are keys you can map text, scripts, or application programs to. If you press a metakey defined with text, it will send that text string out the serial port anytime you press that key. If you have a script mapped to it, it will run the script. And you can even map programs to keys and they will run if you press the meta-key. The new Procomm Plus for Windows features 40 metakeys **ALT 0-9**, **ALT-SHFT 0-9**, **ALT-CTRL 0-9**, and **ALT-SHFT-CTRL 0-9**. Further, you can display any of these four sets as a row of buttons across the bottom of the screen and click on them at will with the mouse - they have the same effect. And you can click on the leftmost key to cycle between the four sets. You can also have a **DIFFERENT** set of 40 metakeys for EACH entry in your dialing directory. So different buttons can have entirely different functions depending on the system you're calling.

The mouse action on Procomm Plus is really quite good. You can set it to send characters or words. You can, while on a BBS, paint a command from the screen with the mouse and send it back out the serial port to the BBS to cause the action. You can also select file names from the screen for download. The one complaint we have here is there is no way to terminate the string sent with a carriage return, frequently needed to actually cause things to happen. We found ourselves mousing menu selections and file names, and constantly reaching for the **ENTER** key to send a carriage return. There IS a checkbox that implies it WILL send a carriage return. We never did get it to actually

send one regardless of this setting. We solved this partially by defining one of the metakeys on the button bar as a carriage return. So you paint the filename and click on the defined carriage return metakey.

The program also features a fantastic scrollbar buffer and a clipboard of course. But it also has a clipboard function ideally designed to store file names in a list for submission to the BBS for download later. It works. It works well.

We did run into something we didn't like, but it is not peculiarly a Procomm function. We've seen it on virtually all terminal programs for Windows. They offer a selection of fonts for the screen. But not all fonts are available on the same size screen window. This is flexible I suppose, but terribly confusing. No matter what system I was dialing, the display was either squashed flat to the point I felt I was peering at it from under a rock, or the text ran off the screen to the left or the right and I never did get to read all of it. Some fonts cause the entire terminal window to shrink to a little box in the middle of the screen - looking a bit like the viewscreen on Star Trek with tiny little characters in it. You'll want to magnify here somehow Mr. Data. By random experimentation, we can get a reasonable display on most systems, but it's a task.

The dialing directory was another big winner in this release. It is superbly easy to use and intuitive. Even better, a tiny **RAPID DIAL** window displays the first entry of the dialing directory in a tiny window on the action bar. A drop arrow lets you drop the whole list and very quickly select a system to dial without really calling up the full dialing directory screen. The directory features a number of powerful options. You can key scripts to directory entries as before as well as terminal emulation. But you can also key metakey files to directory entries and custom keyboard mapping and xlate files to directory entries.

The program also includes the **ASPECT** script language you can use to automate procedures to call a system and download a specific file for example. The script function is NOT compatible with previous versions of Procomm and in fact, there is no conversion utility. You must manually revise your existing **AS-**

AQUILA BBS

Chicagoland's Largest System

Since 1988

Aquila has filled the computer screens of Chicagoland for over three years, growing from a single modem line system in 1988 to over 25 lines in 1992. Aquila's success over the years is due to the enthusiastic support of our users. New callers are encouraged to download our current file list and electronic mail conference listing. A short guided tour highlighting our system services is also available for new users. All of our information is automatically mailed to you to read in the comfort of your home or office. So pick up your modem and give us a call! You will find Aquila BBS to be the most valuable bulletin board in your dialer.

Programs - Thousands On-Line

Give your modem a workout! We add new shareware and public domain programs everyday. Over 400 programs are added weekly. With more than 5 Gigabytes of on-line storage, we stock over 50 thousand programs. Aquila makes it easy to find the programs that are important to you, by organizing them into 120+ file directory categories everyday.

We cater to the Windows User

With Windows becoming the most popular user interface around, we make an extra effort to keep you supplied with the latest programs and enhancements by devoting a special conference area just for Windows containing 2000+ files organized into 40+ file directory categories.

Our organization and the latest programs make our file areas the most popular around. These are just a few of our most popular categories available:

Diagnostic Utilities
System Enhancements
File Organizers
Word Processing

Computer Games
Music and Midi Sound Files
Computer Animations
CAD Drawing Utilities

Business - Finance - Tax
Novell and Lan Utilities
Database
Programming

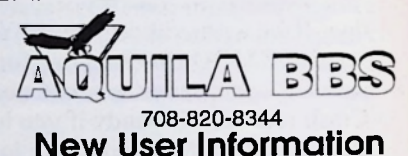
Icons - Icon Managers
Wallpaper - BMP's
Multi-Media Related
Fonts - Font Utilities



The AQUILA BBS Team (Left to right: Kevin & Kristy Behrens, Steve Williams, Chris Babb)

New User Information

All first time callers receive by mail, our printed 'New User Information' and 'E-Mail Conference Directory' guide, as well as a 'Quick Command Guide' to help you get the most out of Aquila. The new user information covers system services such as answers to commonly asked questions, USA Today, Boardwatch Magazine, and Electronic Mail off-line readers. The 'Quick Command Guide' is a desktop lookup for using Aquila commands.



Aquila Starter Kit

Callers that are new to modem communications will find 'The Aquila Starter Kit' a great time-saver. Easy for the beginner and helpful for the expert! This \$39.95 kit includes the following:

Procomm (communications program)
Full documentation for all BBS commands
Off-line file browsing program

Our complete file listing on floppy disk
Off-Line E-Mail Reader
Three month basic membership

Around The World E-MAIL

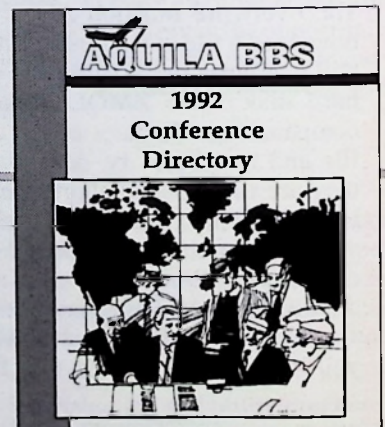
Over 450 Conference Topics

We currently echo to and from ILink, RIME, Fido-Net and Throbneth with more to come in the near future. You can get virtually any question answered here and join in on lively discussions with people from across the country and around the world. We also publish our own 'E-Mail Directory' that is sent to all users of Aquila BBS. This directory lists all of our conferences by category and gives a brief description of the topic of each one. Here is a small sampling of over 450 interesting topics that we offer:

General Discussion
Computer Related

Vendor Support
Programming Languages

For-Sale
Current Events



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PECT scripts to use them. The Windows environment is fundamentally different from DOS. A record mode does allow you to script simple processes without programming.

Procomm Plus for Windows supports the Windows Dynamic Data Exchange DDE function. What this means in this case is that one program can request information from Procomm Plus and get it. With scripts, this is immensely powerful. Let's say you have a Microsoft Excel spreadsheet with a couple of zillion cells all contingent on the prices of 30 stocks stored in 30 cells. This spreadsheet can request data from Procomm, causing it to execute a specific script to dial out to the Dow Jones News service and fetch those stock prices from across the continent. The dependent cells are filled with the latest stock prices and of course the rest of the spreadsheet is updated - all automatically. This process can also work in reverse. Procomm can query the Excel spreadsheet for data to send out to other systems for example. This opens a lot of impressive possibilities.

The documentation was largely a disappointment. The program comes with a User Manual and ASPECT Script Language Guide. Both are pretty, well laid out, and attractive. That said, we could find very little useful information in the User Manual and the index was salutary at best. The program has a lot of features and we constantly found that we wished it would just do such and such, and later found that in fact it did, if you just knew where to poke and what to prod. A program this rich in features can't put them all on screen at once, but it is easy enough to grapple around with experimentally. But the book wasn't much help on more than one occasion. Technical support is actually pretty good and the company does operate a support BBS.

The program is NOT shareware at all and retails for a pretty proud \$149. Registered users of the Procomm Plus DOS program can upgrade for \$69. But if you are committed to Windows, this is the definitive terminal communications program to have. DataStorm Technologies Inc., 3212 Lemone Blvd., PO Box 1471, Columbia, MO 65205; (314)443-3282 voice; (314)875-0595 fax; (314)875-0503 BBS.

BOOKS AND MORE BOOKS

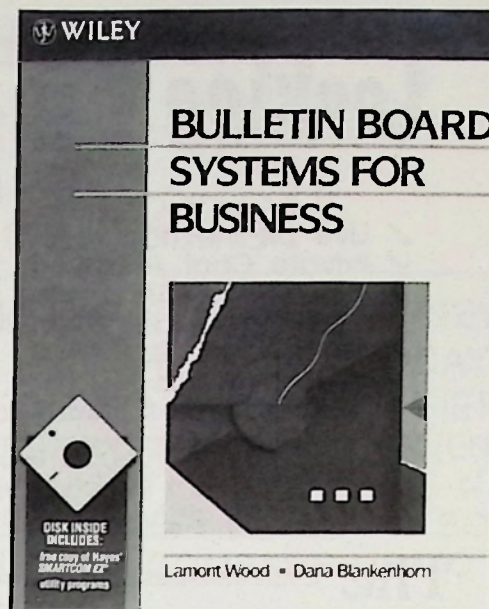
It appears to be the season of the BBS book. For years you couldn't get a title published if it mentioned the B word. Publishers, a pretty all-knowing lot historically, were pretty sure there wasn't a market for data communications type books. A few were published by third tier publishers to no particular success. About three years ago, John C. Dvorak was pretty much told he could do a book on any subject he liked - as long as it wasn't data communications - by a New York book publisher. His next publishing effort was, predictably enough, a book on data communications titled *Dvorak's Guide to PC Telecommunications*. As of last fall it had sold over 70,000 copies at a pricey \$49.95.

And that made it ok to publish books on data communications. This month, we've got more to choose from than ever before with a whole slew of new book introductions.

Leading the band, fittingly enough, is Dvorak's Guide to PC Telecommunications, Second Edition. Published under the Dvorak*Osborne/McGraw-Hill label, the new 1050 page tome includes the Telix communications program, John McAfee's anti-virus utility programs, and a bevy of other communications utilities. The new edition is a bit more realistic at \$39.95 with a thorough update of all the information plus new details on connecting notebook and palmtop computers, lists of BBS software vendors, and more. Osborne/McGraw Hill, 2600 Tenth Street, Berkeley, CA 94710; (510)549-6600 voice; (510)549-6603 fax.

BULLETIN BOARD SYSTEMS FOR BUSINESS

One of the most common situations we face each day at Boardwatch is people looking for easy answers to what type of BBS software to use. Typically, they call on the telephone, in a panic to reach a decision in the next 10 minutes, to tell



us they are "thinking of starting an on-line service and could you please tell us what software to use."

And I'm really quite sympathetic to their plight. I've been thinking of going into neurosurgery and was wondering myself what sort of clothes to wear and whether there were specific saws for that kind of fine detailed work.

Seriously, BBS software isn't like shopping for a word processor. The packages are dramatically different and different intentionally - based on the original vision of the author as to what part of the online puzzle most needed a solution. And there are neither easy answers or good sources for answers. Most BBS operators have only run a few packages and are amazed when THEY see a different system in operation from the behind-the-screen vantage point of the system operator. And the vendors are in a full-contact sport of competing with each other while trying to be all things to all people. The IBMBBS conference on CompuServe should be some help, but it isn't. There is a small band of armed lynchmen hanging on every message. Each time some poor yuck sticks his head in and pops the "which should I use question" about twelve of them jump in like a pack of wolverines and assure him in the most confident tones that this package, which of course they have no vested interest in, is SUPERB for his application - just the thing. In most cases, they would be better off with a blender and a box of bananas

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than the package recommended. All of them I've chased down have been shills for one vendor or another.

And it is a legitimate problem in that there are no automatic answers. If anyone offers you one based on your carefully thought out 25 line e-mail message, they almost assuredly have no idea what they are talking about or worse, have some fiscal interest in leading you to a package best for their pocket or ego, rather than your application.

Some packages are better for database work. Others for chat. Some are good with LANs and some won't work with them at all. Some do connect to FidoNet easily, some you couldn't connect to FidoNet with an Act of Congress. Some packages make great product support systems and some will actually drive your customers away. Some are REAL cheap, and some should be cheaper than they are. Some seem inexpensive up front, and are very costly if your plan works. Until you have a very clear idea of what you want to have a BBS do,

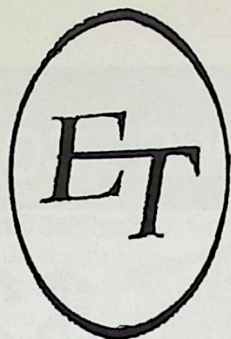
there is little point in discussing which package you need to do it. This is one of the reasons we are having ONE BBSCON, so if you DO develop a glimmer of an idea as to what you want your system to do, you can come and actually touch and feel each package and talk to the authors one on one - all in the same weekend. And if you don't, you can come and see what others ARE doing. I deal with bulletin boards all day, every day, have for years, don't own stock in any of them, and I've never figured out a way to capsuleize it in one issue of Boardwatch, and if I did, it would all be different within 90 days anyway.

Lamont Wood and Dana Blankenhorn have just authored a book titled **BULLETIN BOARD SYSTEMS FOR BUSINESS**, published by John Wiley and Sons, that doesn't quite get it done either. But it is the first book we've seen written from the point of view of a business that wants to put a BBS into play to save money and increase efficiency. It's not an ode to cyberspace, a "gee whiz, watch me beat out the telephone company" hacker guide, a map of the

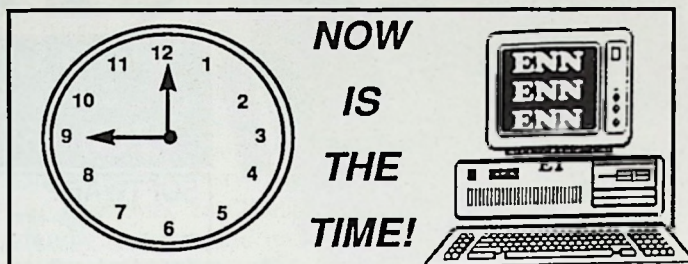
Internet, or a book on how to use your modem and play air wars on GENIE. The book has a very clearly defined purpose and we think a laudable one. It's desperately needed and there is a huge market for it, huge as such markets go anyway.

The book does start with the basics and describes how to get online, what some of the online conventions mean and how you work them. One thing it DOES do reasonably well is talk about the history of how things got the way they are. Often, this historical description can make utter madness suddenly rational and is a good vehicle for describing limitations - and the way the BBS community has worked around them.

The book provides the essential data on about 15 different BBS software programs. It was a little odd the things they picked out about each of the packages, but in total, it was a pretty complete survey of the field. You will at least get the contact information for each of the vendors. Unfortunately, the reviews were nothing short of bizarre. Wildcat! was pretty much cast as a single line



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softy (NOT!), Galaticomm was limited to 16 lines (NOT!), TBBS has 40 menu commands (NOT!)

The book's main recommendation is its point of view and focus. For technical explanations of anything, you will want to go elsewhere. The technical explanations that pack this book were just embarrassingly flawed - and not by just a bit or two. They describe V.42 as an error correction and compression standard based on the Lempel-Ziv compression algorithm and V.42bis as the second iteration of V.42 designed for 14,400 bps connections. This is just plain wrong. V.42 is an error correction standard (Hayes LAPM or MNP) and V.42bis is the compression standard and neither would care or know what speed they were being used at.

Likewise synchronous and asynchronous communications were described as synchronous - where two computers send a constant stream of data to each other while asynchronous assumes that someone is typing on the keyboard of a remote terminal with each byte sent in

an independent manner? On what planet pray tell? Synchronous communications implies data is sent from one computer to another sharing a common transmitted clock or synchronizing signal. Asynchronous transmissions simply don't have a clock or synchronizing signal and the data is actually separated by start and stop bits to indicate where one significant group of data bits/elements end and the next begins. It hasn't the slightest to do with who is using it or for what.

It gets worse. Acoustic modems are defined as those that turn digital signals into sound for transmission over the telephone while with direct connect modems the data is never converted to sound waves????? (NOT!). They had the Data Terminal Ready (DTR) and the Data Set Ready (DSR) both as modem signals back to the computer. Actually the data set is the modem and the data terminal is the computer. DSR is a modem signal to the computer indicating the modem is ready, DTR is a computer signal to the modem indicating the computer is ready. It does take two to

talk. VT100 terminal emulation somehow lends itself more to asynchronous use???? We're not even sure what's wrong with this statement. The Kermit protocol description seems to be an attempt at humor. We're all very pleased Dennis Hayes and Toby Nixon weren't confused about all this. Chapters 5 and 6 of this book should be referred to only for comic purposes.

The book does provide a pretty complete survey of the current terminal programs and BBS software packages with full contact information. But some of the review comments are bizarre. I don't know who all in the world will be offended to learn that ProComm Plus can be thought of as a fancy, expanded version of Qmodem. But I would guess users and developers of both both packages will somehow read umbrage into this ridiculous comment. It does get worse: "The most popular compression scheme is Lempel-Ziv Huffman or LZH format. It is used by all the popular PC compression programs and is also at the heart of the modem compression standard known as V.42." First there is no

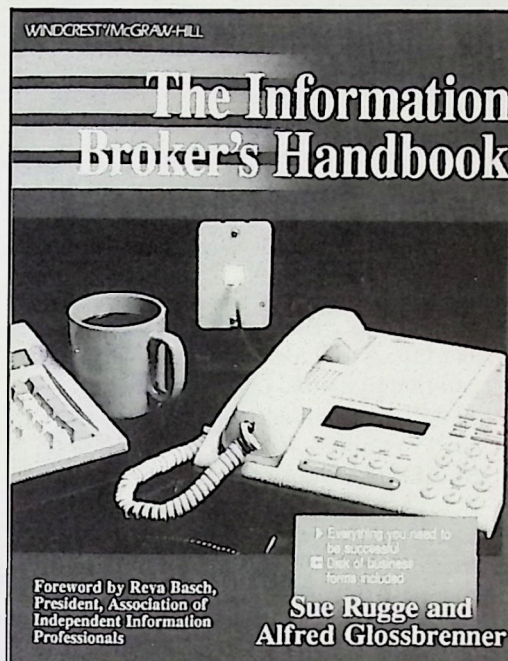
compression scheme termed Lempel-Ziv Huffman. There is a compression algorithm widely known as Lempel-Ziv. There is another known as Huffman coding. Either or both are widely used and they have NOTHING to do with LZH which is a file terminator string denoting a compression program titled LHARC by Haruyasu Yoshizaki. There is such a thing as LZW, which refers to a Lempel-Ziv-Welch algorithm which is possibly what they were avoiding talking about but we're guessing wildly here. V.42 has nothing to do with compression. V.42bis is a CCITT compression standard that does rely heavily on the Lempel-Ziv algorithm. You'll also be pleased to know that text and program files are the least compressible files while graphics and video files are the most compressible data types - precisely the opposite of what most of the BBS world has thought all these years. And finally, you'll be pleased to know that Zoo, a compression program by Rahul Dhesi that we were sure dated back to the time of Christ, is actually the newest of the major compression utilities (again NOT!). The GIF format stores raster images rather than bitmaps (????). There's no "right" way to fix this statement.

The book not only has some accuracy problems but it was a little dated. We were bemused to learn that Tom Scott's Telecomputing Magazine was the leading monthly magazine serving the BBS community. It was never monthly, they may have had one or two issues that came out every two months but for most of its brief history it was a quarterly. It hasn't been in print since early in 1991, and it never led anything.

This book is particularly frustrating because it is just what we wanted. The focus and point of view of this book are PERFECT, a book JUST LIKE THAT is needed desperately, and the writing style is not just readable, but actually enjoyable. The look, the layout, the cover, the figures - excellent. The structure is extremely rational and usable. This is a model of an excellent book. It was generous in its treatment of Boardwatch Magazine and me personally. And it is interesting reading in places. But every single page we looked at was marred by glaringly horrendous errors of fact, and sins of both omission, and commission. If someone, any one, who

knew anything about data communications, the online world, and some of the technical vagaries thereof, would take this same outline and concept and fill it up with just an approximation of technical accuracy, it would be a service to the community. I want to like this book, but it is probably actually dangerous to those who might read it. Technically fatally flawed. Priced at \$34.95, 368 pages. John Wiley & Sons, Inc., Professional, Reference and Trade Group, 605 Third Ave., New York, NY 10158; (212)850-6777.

THE INFORMATION BROKER'S HANDBOOK



Ten years ago there was much ballyhoo about a new profession referred to as Information Research or Information Brokering. It revolved around the fact that the primitive online databases of the day cost over a hundred dollars per hour and were horribly difficult to learn to navigate. If you needed occasional access, you could actually pay someone familiar with the database \$40 or more per hour to do a search on a specific topic, plus the connect charges, and come out way ahead of doing it yourself or letting someone else in your company do it - just in connect time charges.

The concept of information research via modem as a profession had an incredible allure. It was pretty low pressure contract/consulting work, you could work from home out of a home office,

and it was both independent and respectable. But we didn't hear a lot more about it.

Actually, it has happened. But most information researchers are actually specialists in specific industries. They use a modem, or whatever else, continuously to stay abreast of things in their field and they sell this expertise. Many of their clients don't even know they use a modem, and they call themselves consultants (it is NOT just a euphemism for the unemployed). That's the direction we think the whole concept took.

But there were a thousand or so people who did get into information brokering in the original sense. And some of them did pretty well at it. Today there are oceans of information available online and actually a relative handful of people that can actually make sense of it for any particular purpose on short notice. They tend to closely resemble librarians, because that's the background most of them came from. The only reason the concept didn't catch on in a bigger way is that there were just too few good ones to make a visible mass for the rest of the world to notice and use their services.

But the ones who went into it DO enjoy a pretty enviable workday in many ways. Sue Rugge started a firm titled Information On Demand in 1971 in Oakland California. She also headed the Association of Independent Information Professionals in 1988-89. She's teamed up with Alfred Glossbrenner, a computer book author since the early '80s, to write **THE INFORMATION BROKER'S HANDBOOK** a spring release from Windcrest/McGraw-Hill.

This is not precisely a technical manual. They do describe some of the tools of the trade and lean heavily in favor of the large database companies like Mead and Dialog. The book is not really written for the technical person and some good basic explanations of modem communications and terminal programs were clearly for the novice. We found database details disappointing and were surprised at virtually no mention of the burgeoning developments in online library citation and bibliographic databases available through the Internet, and by publicly available dialup systems as well - most of them free of charge. Although some resources were

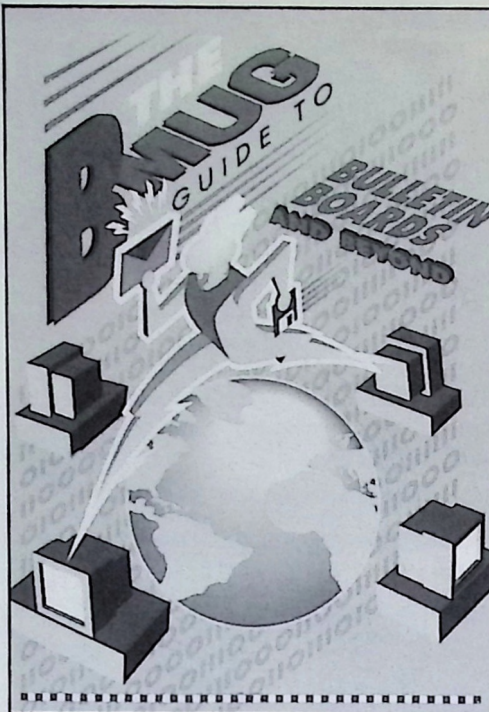
listed and a few technical tips proffered, that was really not what this book was about.

The vast majority of the book was about what it takes to be an information research professional - how to get business, how to approach clients, how to draw up a proposal, what format to deliver the information in, how to bill for it, etc. It was basically a business primer for a specific business - information brokering. We found it a bit cynical in places, patronizing in others, and perhaps self aggrandizing yet in others. But it provided an insider's glimpse into the nuts and bolts of building a business that can result in a pretty comfortable income from working out of a home office. It did convey the excitement and rewards of being an information detective. And it was above all else, realistic. We're persuaded that the sales techniques and self promotion advice in this book are what it would take to make such a business work.

It gets down to cases as well, with actual forms, sample invoices, who to market to and who to avoid, what makes a good customer, and what makes a poor prospect. There's a pretty good resource section on government sources, actually an inspired section of some seventeen pages on how to use a telephone in voice mode to interview people and elicit information. A section on CD-ROMs clearly described an information resource of growing importance - although the chapter was spartan on specific titles and contact/resource information there.

The organization and writing style was very good. Glossbrenner's usual flowery, almost poetic technical style seemed subdued under the graces of a somewhat brusque Rugge, but the result was thoroughly readable and accessible - almost absorbing. If you have any interest in a career in information research, this book should probably be your next step. Recommended. Priced at \$29.95 - 379 pages, Windcrest/McGraw-Hill (TAB Books), Blue Ridge Summit, PA 17294.

THE BMUG GUIDE TO BULLETIN BOARDS AND BEYOND



In books, like BBSs, you have to kiss a lot of frogs to find the princes. But when you find one good one, it causes you to go out actively seeking more frogs. Bernard Aboba's *BMUG GUIDE TO BULLETIN BOARDS AND BEYOND* is one of the most strikingly unusual books published on the topic of bulletin boards and modem communications, and probably one of the more useful compendiums we've yet seen.

Aboba is a member of the Berkeley Macintosh User's Group (BMUG) and actually started their BMUG BBS at (415)849-2684. Heresy of heresies, he did it on an IBM PC clone. But the book is of course oriented toward the Macintosh BBS community - as is the BBS actually.

The BMUG Guide is unusual from the cover to the index. First, it is a large format book that looks like nothing so much as a Sears Roebuck catalog designed by Walt Disney. The large pages allow them to layout a LOT of information in a very accessible style on each page. In these 560 pages reside almost everything a Mac BBS aficionado might ever want to know, and some things that you wouldn't think anyone would want to know until you see them

in print - and realize that twenty minutes just went by that you wish you had back.

Aboba's writing style is irreverent in the most delightful sense of the word. And it is thoroughly readable. The layout of the pages in the style of having text on the right 2/3rds of the page with a gutter full of highlights - and it works well in this book.

The BMUG Guide starts with the usual introduction to communications - but from a Mac perspective, providing advice on modems, terminal software, and making that first connection. It then describes the process of dialing a BBS, what you might find there, and how you can use it. It includes a sampler of Mac BBSs where you can find lots of Mac goodies. Good, but basic stuff.

A BMUG BBS reference chapter details the intricacies of the User Group's own BBS and how to use the various features and gateway e-mail connections they provide. And then the book careens wildly, and delightfully into of all things the Internet. It describes the global network, how to get an Internet account, a whole section on the ARCHIE file finder database, how to ftp on the Internet, the Knowbot address directory, and Internet Relay Chat. There's even a section on Online Library card catalogs.

The book then sports a section on the RelayNet International Message Exchange (RIME) network and it was the first lucid description of this highly centralized PCBoard focused mail network we've read anywhere. The following chapters go into fascinating detail about the early days of Fidonet by Tom Jennings, Ken Kaplan, and Ben Baker (they were there actually). A marvelously detailed introduction to Fidonet explains it more thoroughly than anything we've seen with descriptions of the actual piece parts that make up the toolkit necessary to run a FidoNet system. This is followed by a detailed description of domain name addressing, UUCP, and other global Internet strategies to get a piece of e-mail around the world. Then a chapter on tying Fidonet to Internet including a complete listing of FidoNet/Usenet gateways. This is followed by a series of histories including Tim Pozar on UFGATE, Leo Laporte on MacQueue, Vernon Keenan on EchoMac, and a fascinating descrip-

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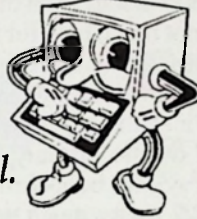
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tion by Michael Connick on how and why he wrote TABBY, the FidoNet interface for Macintosh BBS.

Chapter 31, File Transfer Between Macs, PCs, and UNIX and Chapter 32 File Conversion have placed this book on our close reference shelf forever. Anyone who has struggled with moving data between these various platforms will kill for this information. In these chapters, as throughout this guide, Aboba names names, innocent or not and provides complete addresses, prices, telephone numbers, fax numbers, in the best Boardwatch tradition.

Chapter 33 is a Data Compression Primer masterfully done and covers both Mac programs, PC programs, and common areas between the two.

A series of Appendices provide the most thorough resource guide available for communications in either platform. You can look up virtually any comm product here, books, adapters, BBS software, TCP/IP software, device drivers, whatever. Name, address, telephone number, the works. Appendix D contains charts and pinouts for Mac ports and cables -

BIG charts - no magnifying glass needed - with lots of cable diagrams. There are even application forms for RIME and FREDMAIL, lists of Mac BBSs on RIME, EchoMac Network Nodes, a complete list of FidoNet Help Nodes and Coordinators. Appendix J lists ALL the FidoNet Echoes on the backbone. And finally, an understandable and accurate glossary that DOES correctly define the difference between V.42 and V.42bis.

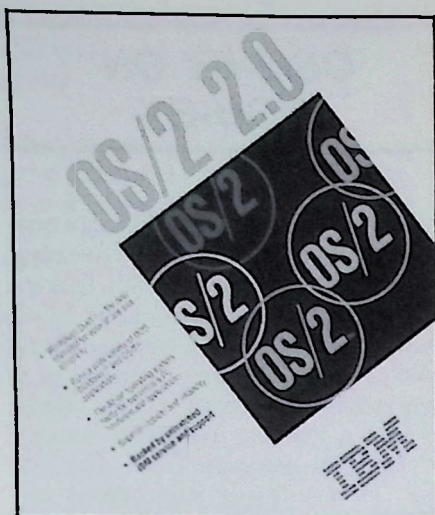
This book is expertly done, technically flawless, and written in a superb and thoroughly original style. If I were to ever attempt to write a book on Mac BBS issues, I would hope it would look like Aboba's. Our highest recommendation. Better yet, if you don't have this book already, you have \$23 more than you know what to do with. The BMUG Guide to Bulletin Boards and Beyond, Bernard Aboba, Price - \$23, Quantum Books, 4 Cambridge Center, Cambridge, MA 02142; (617)494-5042 voice; (617)577-7282 fax; Internet: quanbook@world.std.com or aboba@world.std.com.

OS/2-EY ON YOU-EY

A few years ago, IBM introduced a new operating system they called Operating System 2 or OS/2. It was badly broken, and grossly overpriced at some \$375. With the exception of a couple of hundred people desperately looking for a new puzzle to play with, it failed utterly to find a market. A popular bumper sticker at the time was "OS/2 - Just Say No!" A handful of applications appeared for it and most of those were developed by vendors who became increasingly bitter over having bought into the party line and gotten burned.

Last year, in a much publicized parting of the ways, Bill Gates/Microsoft and IBM divorced under unpleasant circumstances and the future of the PC operating software has hung in the balance of their media war ever since. It has actually been an enormously positive thing for the PC community in some ways, and a terribly confusing one in others. Both Windows 3.1 and IBM's new OS/2 version 2.0 are currently available at \$49.95 and less. The great new advance in operating system software, whoever wins, will be made at a price lower than most shareware registration fees.

The PC industry over the past two years has looked a little "settled". Most of the advances have been in local area network applications and many PC users had decided they were bound to battle the 640KB memory limit ad infinitum. Upper memory block puzzles were replacing crossword puzzles as a pastime. Suddenly, there are TWO operating systems that seem to herald the next big jump in stakes. Microsoft has a bit of an edge with some 9 million copies of Windows on the table. IBM has countered this past May with an operating system that offers the High Performance File System with filenames up to 255 characters in length, a 64 Gigabyte limit on drive volumes, and pre-emptive multitasking. It ALSO runs most of the programs developed for DOS or Windows and can run them simultaneously and variously across a very attractive desktop environment.



Microsoft, meanwhile, has Windows NT (New Technology) in the wings with wide beta rumored for July. This was originally slated to be Microsoft's OS/2 Version 3.0. The two companies are at battle, but one of the problems is they share pretty much the same source code and history. There really ARE reasons to go either way and it really IS a pitched battle between the two. Oddly, we are at a stage in the PC world, with nearly 100 million machines on the street, where even the LOSER in this battle could wind up with a 10 million installation base.

Whatever comes out of it will lead to a couple of things in our computing future, more power, more flexibility, and more hardware. There just really hasn't been any reason to escalate memory about a couple or three megabytes. The 486 hardware is gross overkill for most DOS functions. With these new operating systems, 8 MB, 16 MB, even 32 MB and up will become common. The 486 just gets the job done now and you can watch it strain in the traces. OS/2 Version 2.0 requires an 80386SX or better processor, 60 MB hard drives, and a minimum of 4 MB RAM to operate. Realistically, you are not going to be happy with less than a 486 with 8 MB of RAM and 130 MB drive. For the big boys who like big toys, they've got a reason to go get them now.

We installed OS/2 as a near career change. It took all afternoon and it was NOT trivial or particularly pleasant. The good news is that you CAN put a toe in the water without committing to OS/2 completely. The DUAL BOOT installation mode allows you to install

OS/2 on your existing drive, without reformatting, and you can keep DOS and Windows both on the system. It takes about 30 MB of drive space. The downside is you CAN'T use the High Performance File System, or the long file names if you do. In DOS, you can enter boot /os2 and the system will reboot in OS/2. Each time you fire up your machine it will come up in the OS/2 operating system. In OS/2, you can also select a function to boot from DOS. The system will reboot and come up in DOS and it will always come up in DOS until you boot /os2 again. This toggling between operating systems to run either from the same machine is pretty cunning.

The system is a bit inflexible in installation. It wants to install from the A: drive and there is not much help for it. Our 3.5 inch drive was B: and we just had to take the machine apart and make it A: to perform the installation. It also wants to be installed on the primary boot hard disk. If your system boots from drive C: in DOS, OS/2 pretty much demands to be on the same drive.

The installation process itself is not too terribly rigorous. You boot from the installation diskette and then follow instructions on the screen to feed the monster each of the 21 3.5 inch diskettes comprising OS/2. If you install everything, it will eat about 30 MB of your hard disk real estate.

Once launched, OS/2 does have some things esthetically to recommend it. While Windows reminds us of game software with an overcute preoccupation with glitzy little icons, OS/2 presents a sedate feeling that it is Windows for grownups. The desktop comes up in a clean and subdued pale green color scheme. The screen fonts are a crisp, solid, and somewhat heavy black sans-serif we found very easy to read. All movements and window sizing are smooth and easy.

The system has an immense amount of online documentation - a tutorial and gigantic help files. This is probably good. The little pamphlets that come with OS/2 don't actually qualify as documentation. You get a whole new operating system and no books. No command reference. The Installation Guide, Getting Started with OS/2, and

Using OS/2 booklets were pathetic by any measure and a bit infuriating to look at.

A good bit of the afternoon was spent trying to figure out what the relationship between OS/2 and our LAN was. A year or so ago we gave up on Artisoft's LANtastic. While this LAN has been quite popular with the BBS community, our conclusion after 18 months of battle was that this was one badly broken programming effort in search of someone to haunt. We decided it wasn't us and literally banned it from the building. We went to a product called Network OS from CBIS Systems in Norcross Georgia.

Network OS is a plain vanilla brown wrapper NETBIOS LAN that works with literally any hardware in the world, installs easily, and has become so transparent in operation we no longer spend much time with LAN battles. It works reliably day in and day out without a lot of configuration, babysitting, or head scratching. It's peer-to-peer, shares printers flawlessly, and works considerably faster than LANtastic. The company is set on declaring it a state secret. We've never seen an ad. We've never seen it at a tradeshow. And for all we know it may be stolen. But it works, it's much less expensive than Novell, and with less than a dozen work stations here in the office, it's probably overkill.

In any event, OS/2 couldn't seem to find it. We pawed around all afternoon through the documentation and found a few references to LAN requester and LAN manager - IBM LAN products, but not much success. We DID actually get it to work - but in such a disappointing way that we hesitate to mention it. You can make an image of a DOS boot diskette and store it on the hard drive using an OS/2 utility program. Then you can open a single DOS window in OS/2 and boot the LAN from that disk image. The LAN comes up, and it works quite well. But you can't use the LAN resources from ANY other window, DOS or otherwise. The disk services of OS/2 of course don't recognize it. You have one tiny tunnel out through the LAN and can run ONE application through it. Disgusting.

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A friend of ours went through the same learning curve using LANtastic and was told by Artisoft that LANtastic DID work fine on OS/2. They then gave him instructions on how to build this same little window. When he asked how it could be used more generally, they told him it couldn't.

So basically, until LAN vendors get with the OS/2 program, you can buy IBM's LAN products or do without. This is a most crippling and disappointing indictment of OS/2 version 2.0. If you don't NEED to connect your PC to another, OS/2 is ready to go. If you do, it is simply unusable in current form.

There may be hope on the horizon. Rumor has it IBM is going to release a product call LAN ENABLER 2.0 by the end of the month at something under a hundred dollars. Ostensibly, it will allow OS/2 users to access NetBIOS, NDIS-based, and 802.2-based networks. We haven't the faintest idea what that means but it sounds good. If it makes LAN drives appear on our OS/2 desktop and allow multiple DOS pro-

grams to access those drives normally, we're happy campers. If not, who cares?

OS/2 seems to run reasonably quickly. The ability to do things in the background and present the user with the desktop to continue working before the file searches, printing, or whatever is completed makes it seem faster than it actually is. We tried a few downloads with it and had no problems. The system is NOT as bullet proof as advertised. We were able to lockup the entire machine quite thoroughly with some pretty normal processes. One adventure in Xy-Write was most upsetting. We wrote on a document for about an hour - and lost it all. The system simply froze. But in all fairness, we've performed similar feats of magic with Windows.

The program does run Windows applications. In fact, if you have Windows installed, it will import your desktop. This leads to a somewhat confusing situation. Our Windows setup consisted primarily of DOS programs we ran under Windows - using Windows as a switcher. You cannot run a DOS program from the WIN-OS/2 desktop at all.

This sounds worse than it is. You can of course run all the DOS programs you like under the OS/2 desktop. So you have to rearrange things a bit to ensure that only Windows applications are available in the WIN-OS/2 area.

We could not get Corel Draw to run in OS/2. An application note indicated some gibberish about re-installing Corel Draw. OS/2 also won't run ANY Windows programs that use Dynamic Link Libraries. So it is not unlimited in its ability to run Windows programs. We haven't tested all DOS programs but I'm sure we've a few it won't run there either.

The most disturbing thing about OS/2 is that we did manage to lock up the system pretty gruesomely a couple of times. Worse, the hard drive we installed OS/2 on got pretty confused about just what it was supposed to do with the File Allocation Table (FAT) that keeps track of where everything is on the drive. Once the thread started to come unraveled, we had quite a time stemming the tide of disappearing files. We threw the works at it with Norton Disk Doctor, PC Tools Diskfix, and an

ancient but surprisingly effective 4.5 version of Norton Utilities. We had to reinstall quite a few applications, but saved most of it. Tough night. Naturally, we read a few guarded comments about the OS/2 time-bomb online within a few hours AFTER going through it. The old saw about not buying into x.00 versions of software is probably still on the mark.

OS/2 Version 2.0 could actually fail in the general market and STILL come up a winner with the BBS crowd. Despite its complexity, if BBS software developers create versions for this new OS/2 release, we could quickly see a situation where essentially single-line and LAN BBS software can be running 5 or 6 lines on a single 486 class machine. This would basically be a hybrid between the current two choices of running multiple lines on a single PC ala TBBS or MAJOR BBS or the multi-node model running single lines on each PC LANned together like PCBoard, Wildcat!, and Searchlight. The multi-line model is less expensive and more reliable, but suffers in flexibility. The multi-node model is quite flexible, but in larger line counts suffers from diseconomies of scale. When 60 lines equals 61 PCs, you have a nightmare in motion.

If OS/2 can allow even SIX lines per PC with the flexibility of multi-node software to run DOORS and communicate by LAN, then 60 lines could be done on a reasonably maintainable LAN of eleven machines. That's something you can live with.

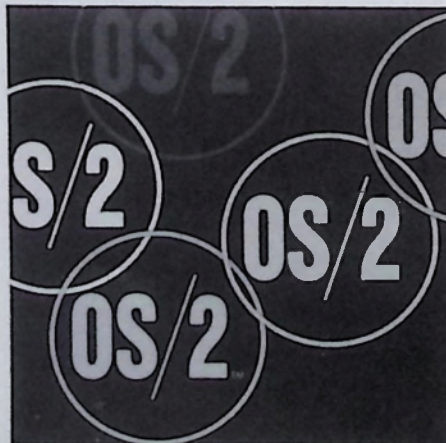
Pricing on OS/2 follows the current rage of thoroughly inexplicable but ultimately useful "competitive upgrades". The system carries a list price of \$195. Between now and July 31, 1992, if you are upgrading from a previous OS/2 version, the upgrade is free. If you are upgrading from DOS, it is \$99. And if upgrading from Windows, it is \$49. Call 800-3-IBM-OS2 and request part number 84F7586 for 3.5-inch diskettes or 10G2992 for 5.25-inch diskettes. Note that it MUST install from the A: drive, so it is particularly important you order the correct media size for your A: drive.

OS/2 has actually been around several years among a small group of devotees, and has been ignored by everyone else.

So for most of us, this is an entirely new operating system. But there are resources for information. CompuServe has a forum for the system (GO IBM-OS2). On the Internet, several Usenet Newsgroups not only carry pretty valuable information about OS/2, but are closely monitored by IBM. The central area of this is comp.os.os2. comp.os.os2.networking deals with LAN issues, comp.os.os2.apps discusses specific application programs, comp.os.os2.programmer deals with programming issues, comp.os.os2.misc and comp.os.os2.advocacy carry general discussions, and comp.lang.rexx discusses use of the powerful REXX batch language that comes with OS/2.

IBM has promised to send a pretty healthy team of communications savvy reps to talk OS/2/BBSs for the ONE BBSCON scheduled for August 13-16 in Denver. We'll be interested to see what they, and the BBS software developers say on this topic then.

Meanwhile, we see the new OS/2 and Windows NT operating systems as doing a couple of things - besides wrecking hard drives. Rather than make life easier on the novice with GUI interfaces, things just got real complicated all over again one more time. But on the good side, once they get the cheese worked out of these new systems, they should dramatically increase the utility and power of the PC platform, and will quite likely re-invigorate the market for power equipment and hardware advances in this long awaited lurch/lunge into the future of personal computing. For the faint of heart, note that we HAD a "standard" with 64K CP/M machines and 300 baud modems. Don't look back.



LEGALLY ONLINE

by Lance Rose

G-MEN TO SYSOPS: GO AWAY KID, YOU'RE BOTHERING ME

What does a sysop do when she is the victim of an electronic crime? Contacting the authorities comes readily to mind as an option. Yet when some sysops tried this recently, they were told to get lost.

A couple of months back, some BBS' in Decatur, Ill. received uploads of a fairly dangerous trojan program named INDY.ZIP (named after the Trojan Horse, a trojan is an innocent-looking program file that hides within it unexpected and usually dangerous program code). The program presented itself as a demo for an Indiana Jones computer game, but when users tried to exit it, it unpacked and activated three different computer virus programs. Two were identified by commercial virus scanning software as 4096 and SCHISM 92. The third was, according to one of the sysops, some kind of "stealth" virus that supposedly arranged itself into a different code sequence every time it stored itself, thus defeating virus scanning programs that detect viruses according to unique, unchanging signature strings, kind of like a virus fingerprint. I'm not fully clear on this stealth virus business, but in any case INDY.ZIP was one dangerous piece of code.

Luckily none of the sysops had their systems wiped out by the trojan before it was detected, though apparently at least one caller's computer system was damaged. Small towns (at least to a New Yorker) being what they are, the sysops identified a likely culprit fairly quickly - a local teenager with a reputation for wreaking havoc on computer systems. They claim that after the trojan incident, this same person was responsible for disrupting the local school system's computer network.

The sysops felt violated by this trojan and its uploader, no less than if a thief physically broke into their homes. So

they contacted the state police and reported a crime - the intentional uploading of a dangerous computer virus into a number of BBSs, with the potential for damaging many computer systems. They already had a good idea of who the culprit was, increasing the chances that the case could be speedily resolved.

No dice. The police refused to look into the matter, and told them to take it to the FBI. This is curious advice, since Congress specifically limited the scope of the Computer Fraud and Abuse Act to permit state authorities to continue to enforce against essentially local computer crimes. Yet the local police acted as if they had no power in such matters. Perhaps this was just their polite way of telling the sysops they were busy with other things.

On to the feds. The sysops, and primarily one out-of-work woman with a single line BBS, gave a call to the Decatur office of the FBI. Crapped out again.

The FBI agent offered a more elaborate reason for refusing to lift his finger than the state police had. He focused on the fact that the suspected wrongdoer was a minor. Supposedly, it would be very difficult to obtain a conviction or judicial order against the kid unless he tampered with a military computer or federally insured computer (such as a bank computer). Since the BBSs involved were most assuredly neither military nor federally insured, it seemed they were plumb out of luck. Oh yes - the FBI man also suggested that the sysops bring the matter back to the state police.

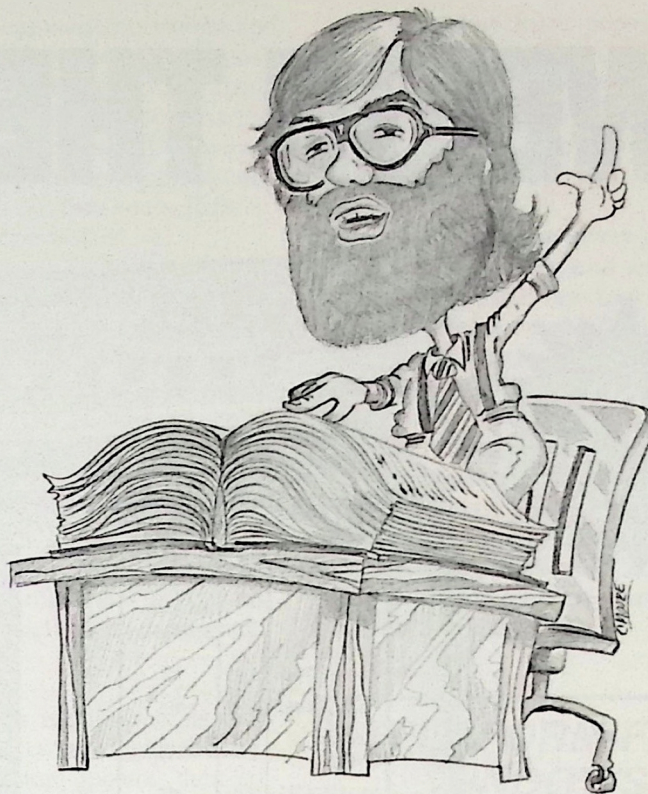
This is the point at which I contacted the sysops to find out their story. I talked to the woman who had taken the lead in seeking help from the state and federal police. She was, understandably, very disappointed in the lack of interest they had shown in the sysops' plight. While she still had some hope that she might find help in dealing with the computer intruder, she also spoke of simply closing down her BBS so the troublemaker could do no further harm to her computer system.

I suggested the local FBI office may not know that much about BBSs or modern computer crime, and that she might try contacting the Washington, D.C. main office. She responded that she was

afraid to go over the head of the agent in Decatur; that he specifically told her not to contact other FBI offices. What a setup - this man absolutely refused to help her and her fellow sysops against criminal activity, then intimidated her against asking other federal agents for help. No wonder she was considering folding up her BBS tent.

Following this discussion, I contacted the FBI's Washington office to find out if these sysops were entirely out of luck. I spoke with an agent who had been very active in computer crime matters, and who was even a former sysop himself. He told me, first off, that the Decatur FBI office was small and provincial, and its occupants unlikely to know much about BBSs or computer crime. The sysops would be much better off going to the nearby Springfield, Ill. office.

He stressed, though, that it would take more than a phone call to catch the attention of the Springfield office. Telephone calls from strangers are rarely followed up. It would be necessary for the sysops involved to file a complaint in person at the FBI office. Once a complaint is filed, the agents are required to give it some consideration. The sysops would then have a far better chance of airing their story.

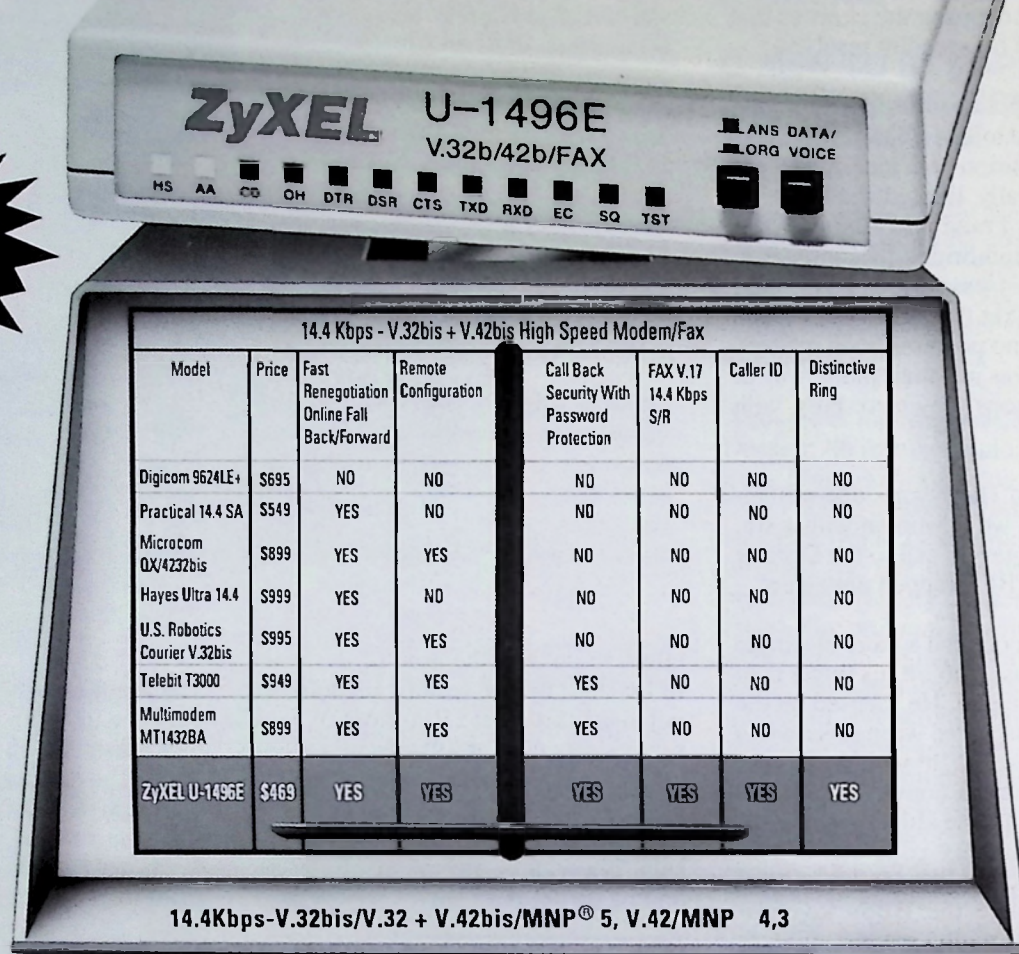


The agent in Washington did not seem very concerned that the suspected wrongdoer was a minor. This makes sense. The computer crime laws do not distinguish between teenagers and adults, nor would such a distinction be worth making. One might observe that all of the computer culprits whose exploits are described in such popular books as *The Cuckoo's Egg* and *Cyberpunk* were in their teens or very early twenties, including Robert Morris of Internet worm fame, and the notorious Kevin Mitnick. Age should certainly play a part when determining an appropriate sentence following conviction, but if someone is certifiably dangerous, their age should have no effect on our use of laws to keep them from causing further harm.

The Washington agent's advice sounded encouraging, so I called back the sysop and passed it on. She was not exactly enthusiastic. Though I stressed the recommendation that she make an in-person complaint, she was reluctant to make the 40 mile trip to Springfield, and complained that she did not know where the Springfield FBI office was. This was surprising - a woman who was considering shutting down her BBS to keep the troublemaker out of her computer system, unwilling to take her car

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 Comparison chart was completed in May, 1992.

out for a couple of hours to try and get a better result? Perhaps this was a measure of her despair at the lack of response she had received from the authorities up to that point.

Then she told me she might write letters to the Springfield and Washington FBI offices. Again I was surprised. Why would she use my information, namely a recommendation that she file a complaint personally, as a reason to mail letters instead? My guess is simply a lack of familiarity in dealing effectively with bureaucracies. She may not have recognized that the information I gave her was potentially very powerful - advice from an experienced person higher up in a bureaucracy on how to cut through red tape at the bottom. I tried to convince her to put her efforts into a personal complaint rather than unsolicited letters to people who didn't know her, and she gave me a firm - maybe -. As we go to press, I don't know if she made any further progress.

This story, even without a neat ending, offers some insights for sysops who may become the victims of electronic crime. First, the cops may not give a hoot. State and federal law enforcement forces hop right to it when a swift response is necessary to avert a public relations disaster, as with the Internet worm that brought down an entire national university research network and exposed serious flaws in the network's security; or when they want to make a little positive public relations of their own, as in Project Sundevil a couple of years ago when they proudly announced apprehending a couple of dozen supposedly dangerous criminal computer hackers across the country (many of them minors, by the way); or when a large company with a lot of former cops and agents on the payroll demands immediate action to protect its corporate profits. But the small BBS sysop? Barely worth a second glance. For the FBI man in Decatur, the fact that the probable perpetrator was a minor was enough to make him lose all interest. Never mind that this minor was endangering the computer systems of several BBSs and their callers, and was likely up to further mischief on other computers.

Second, to the uninitiated sysop the apparatus of the state can be nearly impossible to deal with for crimes any more exotic than theft of a TV set. As the woman in Decatur learned, however you might think of approaching the authorities, you can find yourself faced with a Kafkaesque wall of NO.

What does this mean for the sysop who wants to report a crime? First, make sure you really want to take it to the authorities. They are just as likely to pay you the wrong kind of attention as no attention at all. By now, we have all heard the stories of sysops whose systems are seized as evidence of the crimes of others. It is not even necessary for the police to suspect that the sysop did anything criminal at all - just that his computer box might help them catch others.

If you decide this is not a risk in your case, or that you can live with the risk of erroneous system seizure, then go personally to the local precinct station or FBI office and fill out all the paperwork necessary to make an official complaint. Seek out the person who seems most familiar with BBSs and computer crime. If no one local meets this description, then ask if you can be put in touch with remote specialists who might be able to assist in this local matter. And of course as a sysop, you are not confined to asking the police themselves for this information. You can put out a request for information and assistance on other BBSs and on regional and national networks.

It also would not hurt to consult with an attorney - preferably, a local attorney knowledgeable about computer crime. If this is unavailable in your area, once again you may find one by taking to the networks, who could offer some assistance to a local attorney familiar with criminal matters. Many sysops or even groups of sysops will not be able to afford a lawyer to represent them generally, but even an hours' legal advice from one specifically tailored to their exact situation can be invaluable. You should also consider contacting the Electronic Frontier Foundation, who can also provide advice, and possibly other assistance.

As BBSs grow more popular, sysops should encounter the cold shoulder from the police less frequently. Until then, the small BBS sysop should be prepared to work at receiving help and protection from the police.

[Lance Rose is an attorney practicing high-tech, computer and intellectual property law in the New York City area, and is available on the Internet at el-rose@well.sf.ca.us and on CompuServe at 72230,2044. He works with shareware publishers, software authors, system operators, technology buyers, interactive media developers; on-line database services and others in the high technology area. He is currently revising the book SYSLAW, a legal guide for bulletin board system operators. - Editor]

TELEFORM FOR WINDOWS

by Thom Foulks, Computing Success Radio Show



This is a Runtime Review of **Teleform for Windows**, from Cardiff Software.

Teleform is one of a group of software products now merging to make use of fax communications in ways not even imagined just a couple of years ago.

Because it is such a leap forward, it will take some creative imagination on the part of businesses to realize how useful Teleform can be. Here's an example:

At Business Radio Network, each of our affiliates is required to report certain information to the network regularly - generally monthly; but occasionally, on other schedules as well. At present, this creates a lot of mail and a lot of paper shuffling. When all the reports come in, some one has to go through them and retrieve certain data from them, hand-entering it into yet another form.

With Teleform, and a computer fax card, this process could be almost totally automated. Someone here would prepare a master information form, and transmit it as a group fax to all reporting stations. At the station, someone would fill in the proper blanks on the form, and fax it back. At this end, the computer literally reads the data on the incoming form and automatically transfers it to a database. A programming report which today might take several days to piece together, could be done in just a few hours with far less human effort, far less expense.

Teleform is capable of reading both hand printing of block letters and darkened "bubble" circles, such as answering "Please mark yes or no." It provides extensive form layout capabilities, allowing the user to cut and paste artwork into the form. Forms can be standard or legal size, as well as multi-page. And, because the forms are transmitted directly from computer, they have 200DPI quality - as close to laser printer-quality as fax transmission standards allow. Used with a computer at the receiving end, forms may be filled out with a Windows graphics editor - such as Paintbrush - and transmitted back to the forms collection point, without ever being printed to paper.

Cardiff Software suggests a number of potential uses for such a data collection system:

- Sales order forms faxed from customers, or salesmen on-the-road.
- Fax back surveys.
- Processing credit applications.
- Forms processing for insurance claims.
- Market research.

Any business that collects data from varying locations probably already has a use for Teleform - but it will take some creative imagination to set up such a system, breaking the typical "paperwork" mindset. This is a significant step toward the "paperless office."

Teleform for Windows has been on the market for only a few months, but Cardiff is already expanding the system. The multi-user version, providing for Teleform usage on a local area network, was announced this week. The FactsLine fax-on-demand system produced by Ibex Technologies, now provides for integration of Teleform into its voice-operated system. That means a customer could call a FactsLine system, request the proper form to be received by fax, then fax back the form, filled out and ready to be read by the Teleform into a business database - all automatically, and far faster than the human paper-shuffling method.

Teleform requires a '386 PC or better, with 4 MB of RAM, at least 40 MB of hard disk space, an EGA or VGA graphics monitor, and of course, Microsoft Windows. It supports most fax boards - generally, all those supported by FAXit Software; a subset of which is included for actual fax communications-handling. Teleform data can be written to most standard database formats, including dBASE, Paradox, Excel and Lotus. The package has a suggested retail price of \$995. For full information, contact Cardiff Software, 531 Stevens Ave. Bldg. B, Solana Beach, CA 92075; (619)481-2255 or (800)659-8755 voice; (619)481-4198 fax.

It should be noted the new Paperworks package, from Xerox, is being compared to Teleform by some reviewers. That's misleading, much to the chagrin of both software manufacturers. Although both packages improve fax handling, Paperworks has entirely different purposes and functions and does not include Teleform's database systems.

[Thom Foulks is host of Computing Success, a syndicated radio talk show covering computer technology issues from the Business Radio Network in Colorado Springs, Colorado. The show airs Saturdays at 6:00 AM MDST and Sundays at 2:00 PM MDST on affiliated radio stations nationwide. Foulks also

wrote his own Message Hub BBS software package and operates the Cache la Byte Hub BBS at (719)528-8545. - Ed]

MACINTOSH BBS NEWS

by Bill Gram-Reefer

NOVALINK PRO DEBUTS

ResNova Software, Inc., of Huntington Beach, CA is shipping the first commercial release of its NovaLink Professional 2.0 (NLPv2.0). NLPv2.0 is a host BBS software program for the Macintosh computer that incorporates an easy-to-use graphical user interface (GUI). It supports up to 24 modem connections and an additional 24 connections over an AppleTalk network. With NLPv2.0, a company or BBS operator can quickly set up a completely automated system that provides electronic technical support, electronic mail, public message bases and conferencing, even the ability to allow the online sale of items, including software, clip art or fonts, and books in text-file format.

NLPv2.0 completely supports all computer platforms with TTY, VT-100 terminal emulation, and ANSI graphic commands using color. A host system can also be accessed with NovaTerm 2.0 from a Macintosh. This "user version" of NLPv2.0 provides callers with automated logons, and a complete GUI experience including customizable icons, menu commands, and sounds. NovaTerm AT 2.0 works exactly in the same fashion, but is used to access an NLPv2.0 host system over an AppleTalk network.

Some old-time Mac aficionados may recall NovaLink. Written by Alex Hopmann, who is currently studying physics at Cornell University, NovaLink was originally released in 1987 as shareware. Since then, the program has undergone extensive improvement to be released commercially by ResNova.

The base configuration which supports 3 connections, 20 NovaTerm users, and a one-year subscription to ResNova's

technical support and product enhancements is \$200 (U.S.). Additional links, AppleTalk options, NovaTerm user programs, hardware handshaking cables, and customized set-up services (including screen graphic conceptualization and design billed at a reasonable \$40/hr.), can be purchased separately. \$299 gets you unlimited NovaTerm users and support for each additional node is \$50 each. Take off your shoes and go figure.

NLPv2.0 runs on any Macintosh with at least four megabytes of RAM and a hard drive. ResNova recommends using Apple's System 7.+ The 160 page manual clearly explains many of the setups and functions. One-on-one chat and multi-node live conferences are supported. Features include: X-, Y-, Z-modem, and Z-modem batch file transfers, built-in multi-tasking, high-speed modem support including hardware handshake, and a "tree" menu structure allowing full customization of menus.

Embedded commands provide an internal programming language which gives the system designer over 100 commands to activate a wide variety of specific functions in each area. Security

includes a four 4-digit password scheme that allows the sysop to protect specific areas and define groups. E-mail functionality includes a receipt function, file attachment, and group creation and management. NLPv2.0 offers built-in support for Fidonet through Tabby. Another special feature includes a preview function that allows a user to preview a graphic before download. NLPv2.0 also allows for remote control maintenance of user files and hard disk management.

Of special interest is the ability to design graphics in any draw or paint programs to be named later out there in remote access userland, who will be first to market with a PC-Windows version that will provide a compatible GUI interface to a Mac host program? Talk about Sputnik and the space race - stay tuned! ResNova Software, Inc., 16458 Bolsa Chica Street Unit #193, Huntington Beach, CA 92649; (714) 840-6082 voice; (714) 840-8641 BBS.

GUI HOST BIBLIOGRAPHY

For those that would like more information on TeleFinder and First Class you may want to check out some recent articles and files that are available online. On CompuServe (CIS), you can find regular Macintosh-type sysop chit-chat in the Macintosh Communications Forum (MACCOM). Checkout Section 9 which covers BBS Systems. Also, in Library 9 be sure to consider downloading TFFVSFC.SEA, an even-handed feature comparison of TeleFinder and First Class host software. The piece was penned by Gregg Phillips, an Apple VAR running the Professional Support Network, located in Benecia, CA (707) 747-9566.

Another piece, found recently in *MacWEEK*, is available in that magazine's online news section found within ZiffNet on CIS. Written by Roger Karaker with John Hemenway, the lengthy review outlines the strengths and weaknesses of both host programs. It was uploaded on April 3, and can be found in Section 3 as message # 34224. On AOL be sure to stop by and visit with TeleFinder which holds a public forum in the Macintosh Telecommunications conference room every Monday evening 10 pm EST. First Class meets at the same place and time, but on Tuesdays. These live, online sessions with the developers, current users, and wannabes provides the opportunity to get info, solve problems, make new friends, and put in your two cents for features you'd like to see in upcoming releases. In many instances, you'll also get to hear about new versions and features months before release.

ERRATA CORRECTED

Thanks to Rod Paine, of ASTEC, the Macintosh VAR we cited in the May report on TeleFinder's release 2.6 of its Group Edition. He writes: "Good article on TeleFinder and about ASTEC's use. . . but a little mistake in our setup. We're running on a Mac SE/30 - not a Mac SE. (Oops - BGR).

"As you know, the Mac SE doesn't have the CPU horsepower to deliver full-speed non-compressed files through a V.32bis modem and tops out at about 2800 cps. The SE/30 can move them at

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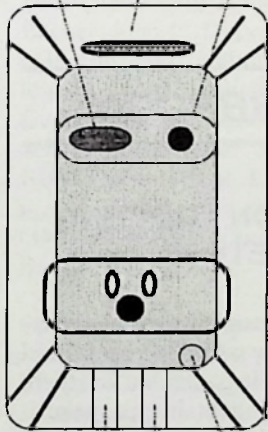
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up to 5300 cps, depending on the file type and compressibility. I'll have to find a copy of *Boardwatch magazine*. Out here in rural Virginia, many magazines are hard to find and are not carried by local magazine stands - read drug stores.- Rod."

NEW SILVERBERG UTILITY

Chris Silverberg, a good hack who's already contributed two freeware Tabby utilities, has announced the release of Suzie, a suite of TeleFinder utilities under the umbrella of one application. In short, Suzie will import New Users from the TeleFinder file of the same name; she will delete inactive users per predefined parameters; and she'll keep track of the top uploaders and free-loaders on your system. Finally, Suzie will, based upon a user's upload/download ratio, automatically adjust a specific user's path or group code. Since Suzie does not do Windows, you'll need a Macintosh and TeleFinder Group Edition Host, version 2.6 or higher. Freeware.

Silverberg is also the author of Winterbird 1.1 and Shoelace 1.01. Winterbird is another TeleFinder utility for sysops using Tabby and TF/Link (Spider Island's Fido connect scheme). Winterbird allows you to specify in advance mailboxes for forwarding mail and messages to other Fidonet addresses. Shoelace is a simple event utility designed to update your BBS software. Both are freeware. All of Silverberg's programs are available from the author and can be found on TeleFinder's host BBS, AOL in the Macintosh Communications Software Library, WMUG BBS (the BBS Chris calls home; see below) or other Mac oriented BBSs that offer sysop utilities.

MAC BBS OF THE MONTH

Check out WMUG, the Worcester Macintosh User Group's BBS serving the Macintosh oriented members of the **Worcester Computer Society (WCS)**. Perhaps due to the influence of the Boston Computer Society just to the east, WCS serves both DOS and Mac users. This laudable lack of platform bigotry makes for an active group that not only serves the academic community at

Clark University and other colleges in the area, but the "townies" as well - imagine that.

A clean, well-lighted place, WMUG runs a TeleFinder host with Tabby operating two lines at 9600. They are a Fidonet node (1:322/115) running echoes including: MACCOM, MACDEV, MACHYPE, WOOF, TF, and MANSION. WMUG offers Volume V of BBS in a Box, and also carries *MacWEEK* and *TidBits*. Local conferences include the usual suspects like Mac Chat and Tech Talk with the most active areas, judging from date and number of messages, being the Classifieds, Multimedia, and Mac Chat conferences. The board supports the activities of the WCS which offers a variety of meetings and workshops for DOS and Mac users alike, with topics ranging from Lotus 1-2-3 to PageMaker and HyperCard. Membership in WCS which includes full access to the BBS is \$36 for individuals, \$40 for families(!), and \$20 for those starving students at Polytech. WMUG, 4 King Terrace, Leicester, MA 01524; (508) 832-5844 BBS.

[Bill Gram-Reefer, based in Concord, California, is a publicist working with Comstock Communications. He operates WORLDVIEW BBS (510) 676-2919 running on a Macintosh computer. As the former editor of SHOWPAGE and associate publisher of Western MicroMarket, Bill has been writing about Macintosh computers since 1984. - Ed]

ONE BBSCON

ONE BBSCON - GETTING IT ALL TOGETHER

There are many parallels to the development of the online world in general and the BBS industry in particular. But there are some things about it that make it truly a "new" thing as well. The BBS world is spread among some ten million basements and living rooms across the country and more yet around the world. These "ports" are an odd mixture of isolation and social forum simultaneously. Callers and BBS operators alike are really quite alone - each in their own

little den. And they are there specifically to interact with each other in a new type of village square. It's an odd combination.

Many people online make acquaintance, become friends, and in many cases even establish business relationships, without ever having the "face-to-face" meeting very naturally an integral part of all other human connections we make. At this point, many have known each other literally for years without actually having the privilege of seeing the other's countenance.

And often, we don't realize the impact this has. I attended a Fidocon a few years ago for the first time, and went to a few of the small "how-to" symposiums held by BBS software developers and was struck by the effect full contact meetings have on people. As one BBS operator said to another, "You're nearly a foot taller in person than you are on the telephone."

The result is an immense number of individuals convinced by their geographic neighbors that they are uniquely involved in something a bit odd - interesting, but odd. In fact, there are over 44,000 BBS operators in the United States today with a lot in common. But it doesn't feel that way at 2:00 in the morning in a basement office when your trying to salvage a dying hard drive.

And BBS operators, for the most part, tend to be an independent lot. Their bulletin boards generally keep them pretty close to the house for one thing. And having the ability to connect electronically, a connection they can control at whim, they do not have the same drive to "organize" that life insurance salesmen and model railroaders do.

But there is an element of curiosity. Like all fields, the BBS world has it's characters who become known in the online world. And there is a naturally curiosity to see what they look and sound like in person. If you haven't seen and heard Dave Hughes wax eloquent on how Thomas Paine should have had a modem - in person - you're only seeing part of the picture when you read his electronic mail postings. If you haven't heard John C. Dvorak's wry wit first hand, his monthly magazine columns

are good - just not as good. And if you haven't met Fred Clark, Tim Stryker, Phil Becker and Jim Harrer face-to-face, you don't see their BBS software programs in quite the same light. Brian Miller and Tess Hedder do not look like what you picture when you dial Channel 1 BBS. Rusty and Edie Hardenburgh don't look or sound like what you might expect as a subscriber to Rusty & Edie's BBS. Kevin Behrens of Aquila BBS really IS a foot taller than he looks on the telephone. Petè White is MORE cantankerous in person than he is online - if you can picture it. Almost everyone is different in person from what you expect in the online forum you're accustomed to dealing with them.

So having seen the powerful dynamic that occurs when 80 or 100 BBS operators do get together physically to compare notes, the question naturally arises, "what would it look like to see 1,000 of them all in the same place at the same time." And what new combinations, deals, alliances, and products would emerge from this intense cauldron of creative talent in one room.

Well, we're going to find out. On Thursday morning, August 13th, at the Stouffer Concourse Hotel across the street from Stapleton Airport in Denver, Phil Becker is going to fire the starting gun on the most intensive three days of BBS jawboning and backslapping the world has ever seen. When he runs out of air, John C. Dvorak is going to deliver a key note address to 1000 BBS operators representing the electronic contact nodes of over 250,000 people across the nation. And then - the games begin.

As of the first of June, over 300 BBS enthusiasts had entered paid registrations for the gathering. With vendors and speakers, over 400 individuals have already committed to attend the convention with more than two months to go.

The three day event promises to be the largest gathering of BBS operators and product vendors in history with over 1000 attendees expected. The show will feature a vendor trade show display area of 51 booths. As of 1 June, only eight display booths remain. Clark Development Company (PCBOARD), Mustang Software, Inc. (Wildcat!), Galacti-comm, Inc. (MAJOR BBS), eSoft Inc.

(TBBS), Searchlight Software (SLBBS), Coconut Computing (Coconet), and MMB Development (TEAMate) represent the BBS software vendors participating in the show. Computer Peripherals, Hayes Microcomputer Products, U.S. Robotics, and Lightning Communications represent the modem vendors on hand. The accompanying floorplan shows the picture as of 1 June.

The event begins with introductory remarks on the BBS industry by Phil Becker. John C. Dvorak, PC Magazine columnist and author of the just released second edition of Dvorak's Guide to PC Telecommunications, will deliver the keynote address for ONE BBSCON this year. Late in the morning, there will be an introduction of the ONE BBSCON Executive Advisory Board.

Educational sessions begin Thursday afternoon, including a session where Boardwatch names the winners and awards prizes in their Boardwatch 100 Readers' Choice BBS Contest. This contest, which ran January 1, 1992 through July 1, 1992, allowed callers to vote for their favorite BBS by submitting ballots. The top 100 systems will be listed, and the top 10 honored with a plaque and advertising prizes at the convention. Boardwatch is flying the win-

ning BBS operator to Denver for the convention. Additionally, a random drawing from all qualified votes cast will result in the award of two U.S. Robotics Dual Standard Modems, A Hayes Optima 9600 Modem, and two ZyXEL U-1496E V.32bis modems to callers whose votes are drawn.

The focus of the show is educational, with some 96 sessions jammed into a three day presentation. Sessions will be held in seven rooms simultaneously throughout the convention - forcing some hard choices on attendees. Linearly, this amount of material would require three full work weeks to attend. Sessions are nominally arranged in tracks for various interests including:

- How to Make Money with a BBS.
- Legal/Social Issues
- Corporate/Business Applications
- Internet Track
- Technical Topics
- Survey of BBS Software
- Fidonet Track
- Macintosh BBS Track
- Terminal Programs and Offline Readers
- Shareware Distribution
- Searchlight BBS Track
- Unix BBS Track
- Wildcat! Track
- TBBS Track

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- PCBoard Track
- Major BBS Track

The Survey of BBS software track, as an example, will allow companies and individuals who want to start a BBS, but haven't decided which software package to use, to attend 12 consecutive sessions consisting of nothing but introductions to the various packages available. If you've been a little puzzled by which way to go with your system, this will be the first and only opportunity in history to see, touch, feel, and talk to the developers of virtually every major contender in the industry.

Michael Bean, of the Arizona Macintosh Users Group, and Bernard Aboba, of the Berkeley Macintosh Users Group, have teamed up to produce a fascinating set of sessions for those interested in the Macintosh as a BBS platform. Over the course of the past year, several Mac BBS multi-line applications have come to the fore allowing Macintosh enthusiasts to operate capable BBS systems. Telefinder, NovaLink, and 1st Class will all be represented. Steve Ciseler, a librarian from Apple Computer will present a session on utilities for accessing the Internet from the Macintosh platform.

Internet is one of the hot topics in the BBS world this year and hundreds of BBS systems are making the link to the largest network in the world. Tim Pozar, author of UFGATE, will head a track devoted specifically to this topic. Ed Hopper, author of uuPCB, a utility to pass mail between PCBoard systems and the Internet will be there. Chris Ambler, author of FSUUCP, a DOS UUCP application will also present information on accessing the Internet. Dave Menges and Ken Harmon, of Colorado SuperNet will be onhand to describe the process of getting a host account on the Internet. Thomas Dell, author of WAF-FLE, a BBS that inherently connects to the Internet for mail will be on hand. And a roundtable discussion of the future of Internet/NREN will round out the festivities.

The technical topics track will include a presentation by IBM on OS/2 and communications, Quarterdeck on DESQview and BBS, along with presentations on Serial Port Basics, CD ROMs, X.25 networks, NAPLPS Graphics. Dave Hughes will head a roundtable discussion on the future of BBSs specifically with regards to graphics and graphics standards. DataStorm will show off their new Procomm for Windows and Mustang Software will rollout their QModem Version 6.0.

Hayes and U.S. Robotics will demo their latest modem offerings and discuss the ISDN pragmatics coming up.

A number of social sessions are planned. The most promising is likely a two session marathon moderated by Jim Warren. Warren founded Dr. Dobbs Journal, another publication that became Infoworld, the Computer Chronicles television show, and the West Coast Computer Faire. These days, Warren is active in bringing word of the online world to political leaders - and vice versa. Most recently, he's proposed an online debate between the various Presidential candidates. Brown and Clinton have agreed to participate and they're still working on Bush and Perot. The debate would be a week-long message conference where candidates responded by e-mail to questions from the press. Joining Warren in the Electronic Democracy sessions will be Tim Stryker, founder of the SuperDemocracy Foundation. Stryker developed the MAJOR BBS program and currently operates the SuperDemocracy BBS. Shari Steele of the Electronic Frontier Foundation, and Dave Hughes, who operates the Perot for President BBS in Colorado Springs, will also hold forth on the topic of voting by keyboard.

Stacy Horn of the ECHO system in New York will moderate a panel on Women Online. Lance Rose, an attorney focusing on online issues and intellectual property rights who has also authored the second edition of SYSLAW, the BBS operators legal guide, will moderate a list of sessions covering copyright's, contracts, trademark law, censorship, and privacy issues. Mr. Rose will be bringing several other legal specialists into this foray into the divisive.

Another session expected to be popular covers dealing with telephone companies. This roundtable discussion will include Gary Nakarado of the Colorado PUC, Shari Steele of the Electronic Frontier Foundation, Scott Lent of the Greater Kansas City Sysop Association, and others who have fought the battle with telephone companies over just what a BBS is.

Jack Rickard and Phil Becker return with their popular sessions on How to Make Money with a BBS. This set was extremely popular at the FIDOCON91

Online Networking Exposition and BBS Convention

ONE BBSCON

August 13-16, Denver, Colorado

Preliminary Session Plan - by Topical Track

INTRODUCTORY SESSIONS

Welcome to ONE BBSCON	Philip L. Becker	08/13/92	0 9:00
Keynote Speech	John C. Dvorak	08/13/92	10:00
Executive Advisory Board Introductions	Jack Rickard	08/13/92	11:00

HOW TO MAKE MONEY WITH A BBS

BBSing for Profit I	Jack Rickard/Phil Becker	08/13/92	15:00
BBSing for Profit II	Jack Rickard/Phil Becker	08/13/92	16:30
Running Your Board Like A Media Business	Wess Kussmaul	08/14/92	08:30
Credit Card Merchant Accounts for BBS	Tim Pfeiffer	08/14/92	10:00
Copyright and Trademark Law for BBSs	Lance Rose	08/14/92	11:30
BBS Success Roundtable	Kevin Behrens	08/14/92	15:00
Running a Subscription BBS for Profit	Jim Harrer	08/14/92	16:30
Publicity/Press Coverage for BBSs	Shari Robert	08/15/92	08:30
Contracts and Relationships for BBS	Lance Rose	08/15/92	08:30
Creating a Business Plan for BBSs	Simon Clement	08/15/92	10:00
Chat/Social BBS Success Roundtable	Scott Brinker	08/15/92	11:30
Computer Press Panel Discussion	David Coursey	08/15/92	13:30
Mail Systems Roundtable	Fred Clark/David Terry	08/15/92	13:30
Online Sales and Catalog Services	Steve Nichols	08/15/92	16:30
Cash by Phone - 900/976 BBS Applications	Scott Brinker	08/16/92	10:30

LEGAL/SOCIAL ISSUES TRACK

Electronic Frontier Foundation	Shari Steele	08/13/92	13:30
Legal Issues for Bulletin Board Operator	Lance Rose	08/13/92	13:30
Education - Alternate Models Online	Dave Hughes	08/13/92	13:30
Democracy Online I	Jim Warren	08/13/92	15:00
Democracy Online II	Jim Warren	08/13/92	16:30
Women Online	Stacy Horn	08/13/92	16:30
International Communications	Dave Hughes	08/14/92	08:30
EFF National Public Data Net Proposal	Shari Steele	08/14/92	10:00
Copyright and Trademark Law for BBSs	Lance Rose	08/14/92	11:30
The Future of NREN/Internet Roundtable	Tim Pozar	08/14/92	15:00
Censorship/Control/Privacy Roundtable	Lance Rose	08/14/92	16:30
Contracts and Relationships for BBS	Lance Rose	08/15/92	08:30
BBS/Telephone Company Roundtable I	Lance Rose	08/15/92	15:00
BBS/Telephone Company Roundtable II	Lance Rose	08/15/92	16:30
Impact of Telecommunications on Economy	Hugh Casey	08/16/92	09:00

CORPORATE/BUSINESS APPLICATIONS

Running a Product Support BBS - PCBoard	Fred Clark	08/14/92	13:30
Running a Product Support BBS - Wildcat!	Jim Harrer	08/14/92	15:00
Major BBS and LANs	Bob Stein	08/15/92	08:30
Wildcat and Novell LANs	Jim Harrer	08/15/92	10:00
PCBoard and LANs	Fred Clark	08/15/92	11:30
Wildcat MHS Gateway	Jim Harrer	08/15/92	15:00

**Online Networking Exposition and BBS Convention
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BBServer	Jim Harrer	08/15/92	16:30
Corporate BBS Applications	Scott Brinker	08/16/92	09:00
Market Research/Survey BBS	Jim Salvas	08/16/92	10:00

TECHNICAL TOPICS

OS/2 and Communications	IBM	08/13/92	16:30
U.S. Robotics Modem Presentation	Jim Summers	08/14/92	08:30
CD-ROMS and BBSs	George Peace	08/14/92	08:30
NAPLPS Graphics Techniques	Dave Hughes	08/14/92	10:00
Graphics Technologies Roundtable	Dave Hughes	08/14/92	11:30
PROCOMM PLUS for Windows 3.1	Phil James	08/14/92	13:30
Using DESQview	Fred Clark	08/14/92	15:00
Database Design for BBSs	Bruce Woodward	08/14/92	15:00
Serial Port Basics	Phil Becker	08/14/92	16:30
Hayes Microcomputer Product Presentation	Hayes Microcomputer P	08/15/92	08:30
ISDN Hardware, Connections, and Future	Hayes/U.S. Robotics	08/15/92	13:30
X.25 Packet Switch Networks for BBS	Dean Kerl/Paul Curtis	08/16/92	09:00

INTERNET TRACK

The Future of NREN/Internet Roundtable	Tim Pozar	08/14/92	15:00
Introduction to Internet	Tim Pozar	08/15/92	08:30
Internet Connection Basics	Tim Pozar	08/15/92	10:00
Internet Host Accounts	Ken Harmon/Dave Menges	08/15/92	11:30
UFGATE - Internet/FidoNet Gateway	Tim Pozar	08/15/92	13:30
uuPCB - Internet to PCBoard Utility	Ed Hopper	08/15/92	15:00
FSUUCP	Chris Ambler	08/15/92	16:30
Coconet and Internet	Brian Dear	08/16/92	09:00

FIDONET TRACK

Introduction to FidoNet	George Peace	08/13/92	15:00
Mac File Distribution Network	To Be Announced	08/14/92	10:00
Software Distribution Networks	Ray Kaliss	08/14/92	11:30
Wildcat! 3.5 and FidoNet	Jim Harrer	08/14/92	13:30
TBBS and FidoNet	Alan D. Bryant	08/14/92	15:00
SEAmail	Thom Henderson	08/14/92	16:30
FidoNet Alternatives for Macintosh	Bernard Aboba	08/15/92	10:00
UFGATE - Internet/FidoNet Gateway	Tim Pozar	08/15/92	13:30
Searchlight Networking	Frank Larosa	08/15/92	15:00

SURVEY OF BBS SOFTWARE

Iconic Macintosh BBS Systems	Michael Bean	08/13/92	15:00
Searchlight BBS Introduction	Frank Larosa	08/14/92	08:30
The Bread Board System (TBBS) Intro	Phil Becker	08/14/92	10:00
Wildcat! Version 3.5 Introduction	Jim Harrer	08/14/92	11:30
Major BBS - Introduction	Tim Stryker	08/14/92	13:30
Telefinder Macintosh BBS Software	Rusty Tucker	08/14/92	15:00
Novalink Macintosh BBS Software	Len Anderson	08/14/92	16:30

**Online Networking Exposition and BBS Convention
ONE BBSCON
August 13-16, Denver, Colorado
Preliminary Session Plan - by Topical Track**

First Class Macintosh BBS Software	TBA	08/15/92	08:30
PCBoard 14.5a BBS Software Introduction	Fred Clark	08/15/92	10:00
Introduction to Coconet	Brian Dear	08/15/92	11:30
TDBS Database Design Techniques	Alan D. Bryant	08/15/92	15:00
TEAMate - BBS Software for Unix	Bob Baskerville	08/15/92	16:30

WILDCAT! BBS TRACK

Wildcat and Callback	Jim Harrer	08/14/92	08:30
Offline X-Press v3	Jim Harrer	08/14/92	10:00
Wildcat! Version 3.5 Introduction	Jim Harrer	08/14/92	11:30
Wildcat! 3.5 and FidoNet	Jim Harrer	08/14/92	13:30
Running a Product Support BBS - Wildcat!	Jim Harrer	08/14/92	15:00
Running a Subscription BBS for Profit	Jim Harrer	08/14/92	16:30
QModem Version 6.0	John Friel III	08/14/92	16:30
PRO Utilities for Wildcat! 3.5	Jim Harrer	08/15/92	08:30
Wildcat and Novell LANs	Jim Harrer	08/15/92	10:00
Using Wildcat 3.5 with CD-ROMS	Jim Harrer	08/15/92	11:30
Using Wildcat 3.5 with DOORS - LIVECAT	Jim Harrer	08/15/92	13:30
Wildcat MHS Gateway	Jim Harrer	08/15/92	15:00
BBServer	Jim Harrer	08/15/92	16:30
WCONVERT	Jim Harrer	08/16/92	09:00
TNET	Jim Harrer	08/16/92	10:30

TBBS BBS TRACK

The Bread Board System (TBBS) Intro	Phil Becker	08/14/92	10:00
TBBS Menu Design Techniques	Phil Becker	08/14/92	11:30
TBBS and FidoNet	Alan D. Bryant	08/14/92	15:00
Serial Port Basics	Phil Becker	08/14/92	16:30
TBBS - Future Directions	Phil Becker	08/15/92	10:00
TDBS Database Design Techniques	Alan D. Bryant	08/15/92	15:00
TBBS Option Modules	Phil Becker	08/15/92	16:30
TDBS Developers Conference	Ben Cunningham	08/16/92	09:00

PCBOARD BBS TRACK

Running a Product Support BBS - PCBoard	Fred Clark	08/14/92	13:30
Using DESQview	Fred Clark	08/14/92	15:00
PCBoard 14.5a BBS Software Introduction	Fred Clark	08/15/92	10:00
PCBoard and LANs	Fred Clark	08/15/92	11:30
Mail Systems Roundtable	Fred Clark/David Terry	08/15/92	13:30
uuPCB - Internet to PCBoard Utility	Ed Hopper	08/15/92	15:00
PCBoard PCBComm	Fred Clark	08/15/92	15:00
PCBoard PCBToolkit	Fred Clark	08/15/92	16:30

MAJOR BBS TRACK

BBS Host Service Bureaus	James Appleby	08/14/92	10:00
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Online Networking Exposition and BBS Convention

ONE BBSCON

August 13-16, Denver, Colorado

Preliminary Session Plan - by Topical Track

Major BBS - Introduction	Tim Stryker	08/14/92	13:30
Major BBS Menus/Security	Scott Brinker	08/14/92	16:30
Major BBS and LANs	Bob Stein	08/15/92	08:30
Chat/Social BBS Success Roundtable	Scott Brinker	08/15/92	11:30
Major BBS Third Party Developers Conf.	Tim Stryker	08/15/92	13:30
Online Sales and Catalog Services	Steve Nichols	08/15/92	16:30
Corporate BBS Applications	Scott Brinker	08/16/92	09:00
Market Research/Survey BBS	Jim Salvas	08/16/92	10:00

SEARCHLIGHT BBS TRACK

Searchlight BBS Introduction	Frank Larosa	08/14/92	08:30
Searchlight Menu Design	Frank Larosa	08/15/92	10:00
Searchlight Networking	Frank Larosa	08/15/92	15:00

MACINTOSH BBS TRACK

Iconic Macintosh BBS Systems	Michael Bean	08/13/92	15:00
MacConnectivity	Bernard Aboba	08/13/92	16:30
MacBBS File Management	Michael Bean	08/14/92	08:30
Mac File Distribution Network	To Be Announced	08/14/92	10:00
Telefinder Macintosh BBS Software	Rusty Tucker	08/14/92	15:00
Novalink Macintosh BBS Software	Len Anderson	08/14/92	16:30
First Class Macintosh BBS Software	TBA	08/15/92	08:30
FidoNet Alternatives for Macintosh	Bernard Aboba	08/15/92	10:00
Apple/Macintosh Tools for Internet	Steve Cisler	08/15/92	15:00

UNIX BBS TRACK

Introduction to Coconet	Brian Dear	08/15/92	11:30
TEAMate - BBS Software for Unix	Bob Baskerville	08/15/92	16:30

SHAREWARE DISTRIBUTION

Association of Shareware Professionals	Bob Ostrander	08/13/92	15:00
CD-ROMS and BBSs	George Peace	08/14/92	08:30
Mac File Distribution Network	To Be Announced	08/14/92	10:00
Software Distribution Networks	Ray Kaliss	08/14/92	11:30

TERMINAL PROGRAMS AND OFFLINE READERS

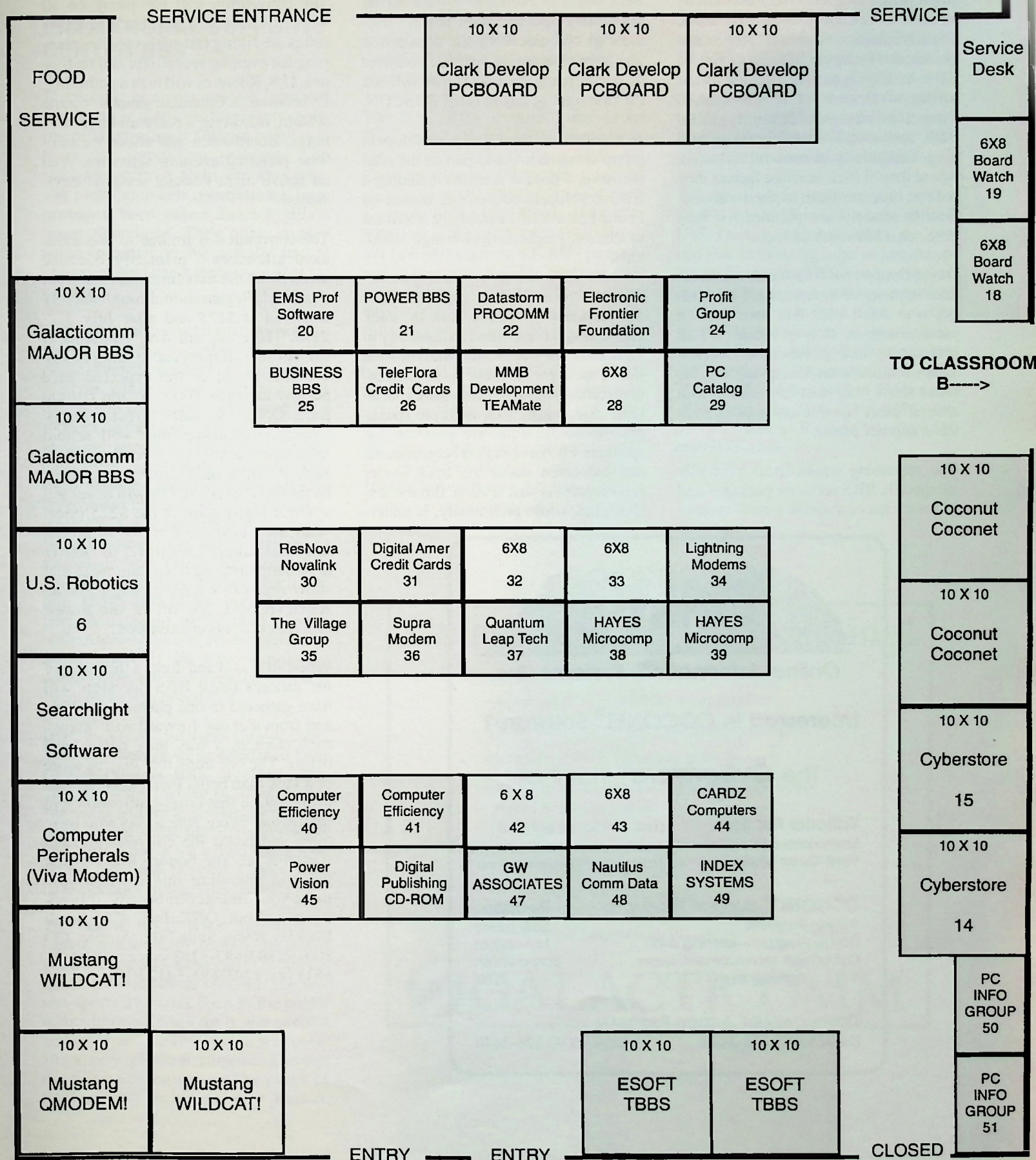
Offline X-Press v3	Jim Harrer	08/14/92	10:00
PROCOMM PLUS for Windows 3.1	Phil James	08/14/92	13:30
Offline Mail Readers/QMail/1stReader	Mark "Sparky" Herring	08/14/92	13:30
QModem Version 6.0	John Friel III	08/14/92	16:30
SEAmail	Thom Henderson	08/14/92	16:30
PCBoard PCBComm	Fred Clark	08/15/92	15:00

VENDOR EXHIBIT AREA FLOOR PLAN

Online Networking Exposition and BBS Convention

ONE BBSCON - August 13-16, 1992

as of 1 June, 1992



convention last year. This year it will be significantly expanded with follow on sessions covering business plans, publicity, credit card merchant accounts, and a series of roundtable discussions on how to operate a successful BBS. The BBS success roundtable, for example, headed by Kevin Behrens of Aquila BBS in Chicago, will include Brian Miller of Channel 1 in Cambridge, Rusty Hardinburg of Rusty and Edies BBS, and several other operators running financially successful systems, where they'll each describe factors they believe were critical to their success. Similar sessions are planned for mail BBS, chat BBS, and so forth.

David Coursey, of Infoworld, will moderate a panel of computer press panelists who detail what they look for in a press release or story proposal to find interesting and publishable stories. Thom Foulks of the Computer Success radio show will join him along with several other notable columnists from the computer press.

The remaining tracks focus primarily on specific BBS software packages and in most cases comprise a mini-symposium for operators of each of the packages with sessions covering specific how-to techniques for networking, menu design, and operation. Most of the BBS software vendors appear to be scheduling specific new product rollouts to coincide with the convention and from what we've learned, a number of eye-popping new advances will see the first light of day at ONE BBSCON.

A number of third-party developers group sessions are also part of the plan and several private sessions including a BBS developers conference hosted by Frank LaRosa of Searchlight Software to discuss graphics interchange standards.

The accompanying four page table lists the preliminary session plan by track (some sessions are listed redundantly in more than one track). Note that the final list of speakers for these sessions is incomplete and many sessions are roundtable discussions with multiple speakers. Some sessions are planned for speakers who have not yet been selected and are listed under the track leader responsible for that session. But the session plan, while preliminary, is under-

way. And it promises the most intense three days of BBS information ever presented anywhere.

The convention will not likely be all work however. A set of nine hospitality suites are filling fast with vendors planning for evening receptions and festivities. U.S. Robotics will host a gathering. Cyberstore, a Canadian graphic online system, is hosting a party all three evenings. Boardwatch and eSoft are likewise planning evening activities. And an active nightly social scene is envisioned.

The convention is limited to one thousand attendees - primarily because that's about the maximum that can fit in this hotel. Registration through July 31 is priced at \$175 and after July 31 - \$225. There are still over 600 slots to fill, but registrations are running nearly a month ahead of the expected pace needed to reach 1000. At the current pace, ONE, Inc. sales director Peggy Conniglio estimates they will sellout sometime during the second week in July. If so, a rather interesting thing happens. ONE BBSCON will never sell a single registration at the \$225 price. With the unexpected break in airline fares this summer, air travel to Denver is shaping up to be a bargain. Note that show organizers have arranged for an ADDITIONAL 5% off of the lowest fare for convention attendees.

When all is said and done, a thousand of the nation's finest BBS operators will have gathered in one place at one time and from that day forward will "know" each other in a way they never have before. The one thing that may be more of a kick than being there, is being part of the future that cross-pollination will create, and being able to say you were there and heard the conversation that started it all. The bottom line - if you plan on attending this convention - make your arrangements early. It is going to sell out. ONE, Inc., 4255 South Buckley Road, Suite 308, Aurora, CO 80013; (303)693-5253 voice; (303)693-5518 fax; (303)693-5432 BBS.



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IBM NATIONAL SUPPORT CENTER BBS

Just a bit over a year ago, we lamented the dearth of software developers sporting product support bulletin board systems. Inevitably, our problems with software occur at night and are generally pretty mundane questions that have probably been asked about a zillion times previously. They often involve some information we actually had at one point, and can't locate now that we need it.

Happily, it seems that the software community have discovered bulletin boards. Some operate excellent product support systems while others operate systems that will in fact allow you to establish a modem connection - and little else. But everyone seems to be putting them up. Our VGA card vendor has one. Our LAN vendor, CBIS, who is steadfastly determined to keep their excellent Network-OS LAN product a state secret, has a limp one. We use Xywrite Word Processor and THEY have one. Microsoft is currently working on a 240 line TBBS system for Windows support. A database we've been playing with, Alpha4, has one. It has reached the point where if we have a problem around here, the first question we ask is "do they have a board?"

IBM, as it turns out, has a slew of them. Several years ago we profiled their **User Group support BBS (404)988-2790**. This is a system where PC User Groups can swap and trade newsletter material mainly. But with the introduction of OS/2, we thought we would take a look at the National Support Center BBS IBM operates in Marietta Georgia.

The **IBM NSC BBS** operates at **(404)835-6600** with lines for the Hayes Ultra at **(404)835-6896** and U.S. Robotics modems at **(404)835-5300**. The system sports 37 nodes open to the public with additional lines for dealer support and internal use. The system was overall, a very pleasant surprise. For one thing, it is actively manned by a crew of IBM sysops including Wyn Easton,

Tony Reed, Martha Goodliffe, and Todd Simmons. Unlike many product support systems that irrationally "don't answer tech support questions", these guys do. And to better put it into play, the regular tech support phone people seem to actively refer customers to the BBS to download device drivers and files to assist their problems.

The NSC BBS actually runs under OS/2, albeit version 1.30, using Multi-net, a BBS package from Multi-net Communications, 15702 Black Bear Court, Klamath Falls, OR 97601; **(503)883-8099** voice; **(503)883-8197** BBS) It was our first adventure on this BBS package and it was a thoroughly pleasant surprise. While patterned after the RBBS/PCBoard model, it was chock full of flagrantly handsome features including a full-screen editor, some pretty advanced file marking and downloading features, and an online database.

The system consists of four Model 95 file servers and an indeterminable number of Model 80 line servers on a 16Mbit Token Ring LAN using IBM's LAN Manager software. Each model 80

uses an ARTIC serial port card to service six modem lines at 9600 bps. The ARTIC (A Real Time Interface Co-Processor) Portmaster card appears to be an IBM product consisting of a "smart" serial card with 8 RS-232 serial ports controlled essentially by an Intel 12 MHz 80C186 co-processor. Using Direct Memory Access (DMA), this co-processor does most of the work of transferring data through the ports - leaving the Model 80 processor relatively free to slave away for OS/2.

We noted some jerkiness, and with a 14,400 bps V.32bis link to one of their USR Dual Standard modems, the system had an irritating habit of just dumping us during downloads as we climbed over 1600 cps, but otherwise seemed sturdy. Several bulletin files describe the ARTIC card line in vainglorious detail - including third party support. You can obtain more information on the ARTIC card line from Andrea Westermine, IBM Corp Zip 2102, 1798 NW 40th Street, Boca Raton FL 33431; **(407)443-6286**.

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So with Multi-net and OS/2, IBM has developed the hybrid BBS we've been talking about - a cross between multiple line per CPU and multiple LANned CPUs.

The system sports an impressive array of information about OS/2. The DA command takes you into an online database of OS/2 product vendors. The database is not too deep (basically product name, vendor name, and contact information), but it is wide with thousands of listings. You can search by product category, product name, or just on a keyword. It's not quick, but it works.

The file areas were impressive. We immediately found a couple of useful files including **VSVGA.ZIP** - a driver patch for some VGA cards that get a bit of streaking and snow in OS/2, **ET3745.ZIP** - a 1024X 768 driver for TSENG 4000 VGA cards, and **COM16550.ZIP** - a driver for buffered 16550 UART serial port chips often mentioned in Boardwatch as a means to handle high speed modem communications in better style. This file actually contains a **16550.SYS** and **16450.SYS** files written by Gerry Rozema that can be used to replace the flawed com.sys file that comes with OS/2.

The other file areas were also handsomely supplied with various files - almost all for or about OS/2. We found communications programs, versions of ARC, ZIP, and DSZ for OS/2, games, utilities, and so forth. The OS/2 universe just isn't as big as DOS yet, and so you may view these as pretty limited groups of files, but they were well focused on OS/2 and there were more than we expected given the recent life through version 2.0 of what was thought a dying product.

About 15 conferences support message traffic on predominantly OS/2 topics and seem very well attended - about 75 new messages daily. We found the LAN area particularly interesting with hundreds of questions from those who couldn't quite seem to get OS/2 to work with their LANs. Almost everyone installing the new Version 2.0 for the first time is running into the surprise of surprises - it doesn't work with their current LAN at all. Apparently you have to use IBM's LAN manager or wait for Novell's new versions, due this summer, to use OS/2 on a LAN. Everyone else can get ONE DOS window to work (kind of) on their LAN, but not the entire operating system or even other DOS windows. We found this a gruesome surprise. And ap-

parently a couple hundred other lost souls did too as they were all asking about the same question - "what am I doing wrong?" We saw a bit too little in the way of answers unfortunately.

Stylistically, the system was not overwhelming. But between the online database, a fatly stocked bulletin area, the file areas, the message conferences, and the willingness of the sysops to tackle tough technically detailed questions, the National Support Center BBS comprised a rich and useful stock of information about OS/2 - a topic you'll probably want to learn more about over the next year or so. The system is free and open to all callers. IBM National Support Center, 2300 Windy Ridge Parkway, Marietta GA 30067.

SALES AUTOMATION BBS

Salesmen are a different breed. And they can be exasperating for normal humans to deal with. But the truth is that not many companies get very far without one. You can make the finest quality widget in the world, turn out billions of them by breathing on the floor, and price them at a deep discount, but until somebody actually sells one you have what's referred to as a "cash flow problem."

Fortunately, there are some 10 million salesmen trodding the streets of America hawking everything from stealth bombers to wax toilet bowl seals. Many of the pricier items have what's termed long sales cycles. This is where you call on the same guy 17 times in a year, and suddenly he gives you a \$200,000 order. The problem is, the salesman has to kiss a lot of frogs 17 times to find the prince with the order. And he has to remember what he said to each one the last time he called, their wife/wives's name, dog/pet preferences, etc. This starts to look like an information problem.

Personal computers have made it easy. And many sales road warriors have virtually adopted the laptop as a side-arm. Hundreds of "contact management" software programs have made it to market over the last decade. Currently, Telemagic and ACT! seem to be the elite of the genre but there must be a couple of hundred of these sales lead contact management packages available.

Unfortunately, there are still a lot of salesmen who haven't made the move to computers. There may be a personality conflict here. Programmers tend to be iconoclastic misanthropes who consider faces on the television about as close to a relationship as they need in this life. By way of contrast, most sales pros fancy themselves "people types" and there may be a psychological profile more inclined to deal with computers than others.

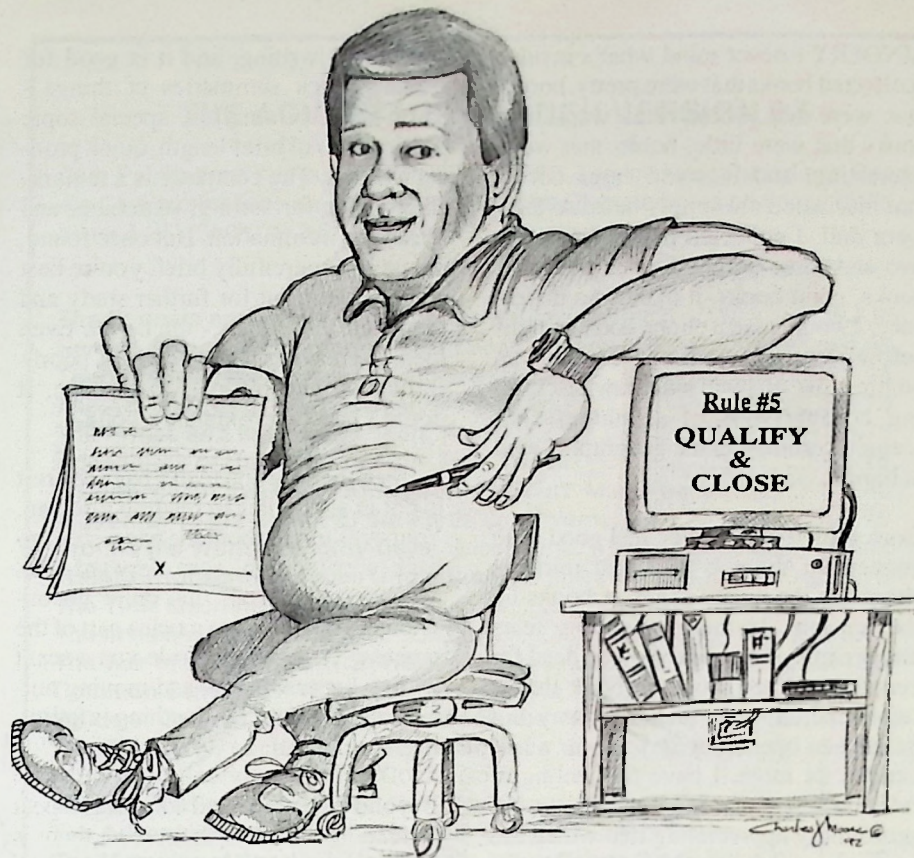
Rich Bohn worked as a salesman for a number of years selling electronic instrumentation for companies like Varian, Nicolet, and Sieger. In the early '80s he bought an Apple II and began looking for software to help him in his profession. There was little available at the time but he kept after it. In 1984, tired of corporate life, he moved into a home on the side of Cougar Mountain outside of Seattle and started the Denali Group. His primary product was a newsletter titled *Computer Aided Selling*

launched in January 1985. It covered his favorite topic, computers, and served the sales professional.

Today, *Computer Aided Selling* is titled *Sales Automation Success* and sports some 2000 subscribers at \$87 annually. Bohn also issues a series of special reports, and will publish his first book this fall on the Macintosh as an aid for sales professionals.

In December 1991, he also launched the *Sales Automation Success BBS* at (206)392-8943. This single-line Wildcat! board is already making inroads in this particular specialty - drawing salesmen from across the country who are looking for answers to what's the best software not only for contact management, but general database, vehicle maintenance and expense, and other record keeping chores.

Bohn has a talent for writing about technical topics in a very clear, understandable form for the *Sales Automation Success* newsletter. And it works to his advantage with this BBS. The bulletin area very clearly lays out who Denali Group is, what they do, what each of the message conferences do including a sales software conference, sales presen-



tations conference, laptop conference, PC contact manager conference, sales pros conference, and more.

Bohn's mission is to bring the religion of the PC to a group that in many cases is a little bit afraid of it. But he's also working with vendors of the sales-aid type products. One of his heroes is Willy Lohman from the movie classic *Death of a Salesman*. The Denali Group has established "Willy" awards for those products most of use to sales professionals. And according to Bohn, if Willy had had some of these tools in his day, he might be comfortably retired on a golf course today. Richard Bohn, Sales Automation Success BBS, 2815 NW Pine Cone Drive, Issaquah, WA 98027; (206)392-3514 voice; (206)391-7982 fax; (206)392-8943 BBS.

BOOKS ONLINE

Since the first typewritten word appeared on the first computer terminal about three decades ago, not a single month has gone by without someone, somewhere, for the very first time hatching the presumably original idea

that "gee, we could put BOOKS online and we wouldn't need paper books anymore!" We receive weekly descriptions of this "fascinating new concept" ad nauseum.

If the concept truly had merit, it would have become popular many years ago. Contrary to popular belief, books are not terribly large as data files go and as text, they are particularly easy to compress, uncompress, transmit, store, and manipulate. So why aren't most of the books in the known universe available on disk by now?

There are a number of reasons cited. But we believe they are not commonly read on computer for the same reason that they probably never will be: reading from a computer screen and reading from a book are two ENTIRELY different processes. They feel different. They act different. And until some very fundamental and all encompassing changes are made to computer screens, they will be different.

I confess an unnatural admiration of books. I used to prowl yard sales looking for books to buy cheaply. I bought many simply because I admired the

BINDERY - never mind what's inside. I collected books that were pretty, books that were old, books that were big, books that were little, books that were interesting, and in some cases books that fascinated me simply because they were dull. I collected books that were two and three hundred years old. Bad books, good books, it makes no difference. I would read a phone book at night before sleeping just because there was nothing else on hand and draw fascinating comparisons of surnames that seemed common to the geographic area at hand.

Books smell good. They feel good. The concept of them is almost a miracle. Bound in the musty pages of books lie the wisdom, learning, yearning, fears and dreams of men and women dead for centuries. When I open a book that is two hundred years old, and may not have been opened by anyone for a half century or more, I have the feeling of releasing a genie from the bottle. Of profoundly appreciating that which has been ignored for decades. A feeling of discovery. By combining the etchings of the long dead authors words on the page with my mind, I can mentally recreate lost times, places, and events - probably with pretty good accuracy. I can start and stop them at will or whim. They're portable. They're durable. And best of all, you can read them on the toilet and no one questions it and there are no cables.

I like to hold books. I like to flip through them. After over thirty years of reading thousands of them, I can stand at a book case and just admire the miracle that they exist. And for common men like myself, they DIDN'T exist until the last two to three hundred years and were largely unaffordable to most until this century. In many, many ways, it is a distinct privilege to live in the age we do - rather than one of the hundreds of centuries of civilization that precede us. All of the much lauded development of computers to date barely places a period at the end of the list of good things that have come to the human condition as a result of books.

But basically, I can read books for hours, and computer screens for tens of minutes. The monospaced, 80 column, 24 line, vertical, slightly blurry computer screen is tiresome to read from. It

is good for writing, and it is good for reading quick summaries of things - daily news summaries, special topic publications of brief length, quick product reviews. The computer is a remarkable device for sorting, searching, and retrieving information. But once found, unless it is mercifully brief, you're best off to print it out for further study and the better the printer - the better. Even then, the result is a pile of pages, poorly formatted, and difficult to manage. It doesn't even approximate a book.

Further, the way you read a page of print is not at all similar to reading a screen. Your eyes move about the page, stop, go back a paragraph, scan forward, etc. Most people do all this quite unconsciously. But it is very much a part of the process. Terminals provide you a scant 24 line linear window and moving outside of it to recheck something is fatiguing.

Beyond the fatigue and unnatural aspect of reading text from the screen, there is an intrinsic value in a book that goes considerably beyond the words in print. In the world of book publishing, there are still books published in hard cover with marbled papers and in some cases leather binding. The same book is published later in paper back at a fraction of the original cost. If it were only the words on paper, there would be not the slightest market for the hard cover edition. But in many fields, there always will be. Hand someone the leather bound gold leaf edition of a book, and the same thoughts and words on diskette, and the perceived value of the two items is dramatically different. The \$70 for the former seems almost a better value than 29 cents for the latter.

I would expect some day book publishers will give away the text of books entirely free of charge electronically. If you like what you read, you'll be able to order the book. It will take some brave soul in the publishing industry to realize they will actually sell an order of magnitude MORE of good books this way than they would by "protecting" the copyright of the data. But it will certainly happen.

The percentage of the population that actually reads books is probably in decline. There is enormous competition in the publishing market. And anything you can do to bring favorable attention to a book release is money in the bank. It will happen eventually.


But there is a utility to electronic text. It is much easier to store, retrieve, search, and analyze. And sometimes, these search/compare functions can cause information to float to the top that never would from the chunks of dead tree.

We've found a group that takes the opposite tack entirely. Advantage USA has a cunning twist to the above. "We'll publish the books electronically at almost no cost to ourselves, and get the reader to pay for the book ANYWAY." I think this is the "build a business by wishful thinking" approach, but who knows? We've been wrong before.

The product they've put together does have some interesting things to recommend it. They run a BBS in Houston title **ADVANTAGE HOUSTON** at (713)977-9505. This is a relatively simple, but very easy to use online service. You can download their book reading software, titled the Advantage Reader Version 2.5 in the file **READER25.ZIP**. They also have several free "books" you can download to try out the reader including **ADVUSA.ZIP**, a collection of American speeches and documents, and **AESOP.ZIP**, a collection of 82 Aesop's Fables.

The Aesop's Fables are quaint, but most of Aesop's Fables are barely a screen in length and we found it only briefly entertaining. **ADVUSA.ZIP** was quite more fascinating as it included some of

The Meeting House BBS
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the more famous speeches and governmental documents from our national history, including:

- Mayflower Compact
- Declaration of Independence
- United States Constitution
- Emancipation Proclamation
- Give Me Liberty, or Give Me Death! - Patrick Henry
- Inaugural Address
 - George Washington
- First Inaugural Address
 - Thomas Jefferson
- Gettysburg Address
 - Abraham Lincoln
- Second Inaugural Address
 - Abraham Lincoln
- The Opening of the Atlanta Exposition - Booker T. Washington
- War Message to Congress
 - Woodrow Wilson
- War Message to Congress
 - Franklin D. Roosevelt
- Acceptance of the Nobel Prize
 - William Faulkner
- Farewell Address to Congress
 - Douglas MacArthur
- Inaugural Address
 - John F. Kennedy
- I Have a Dream
 - Martin Luther King, Jr.

This collection was moving in a couple of ways. Bringing these documents and speeches together in this way in a handy collection was effective. For one thing, most were actually quite brief. And the Advantage Reader did make them relatively easy to read or print. When you take them as a whole, we did have quite a few men of rather grandiose vision and purpose. I was disturbingly struck by the lavish mention of God in all our early documents, in the speeches of ALL of the leaders we revere, and throughout our history in general. George Washington, Thomas Jefferson, Abraham Lincoln, Martin Luther King, - across the board these men were just verbally erupting with praise, thanks, honor, and prayer to God. Why is it we don't hear about that God stuff from our political leaders today? Have the confused little special interest weenies in our society actually been successful in making God not politically correct? Are the equally weird Satanic Conspiracy theorists onto something?

THE ADVANTAGE READER VERSION 2.5

Club Publications Available on Disk May 1992. The following PaperLess Readers Club publications are available to Readers Club members on floppy disks, either 5.25" (360K) or 3.5" (720K) unless otherwise indicated:

The Sonnets and Other Poems William Shakespeare.	\$ 7.95
Hamlet, Prince of Denmark William Shakespeare.	\$ 4.95
The Taming of the Shrew William Shakespeare.	\$ 4.95
The Adventures of Tom Sawyer Mark Twain.	\$ 5.75
The Prince and the Pauper Mark Twain.	\$ 5.75
Adventures of Huckleberry Finn Mark Twain.	\$ 5.75
A Connecticut Yankee at King Arthur's Court Mark Twain.	\$ 6.45
A Journey to the Center of the Earth Jules Verne.	\$ 5.75
Around the World in Eighty Days Jules Verne.	\$ 5.75
Twenty Thousand Leagues Under the Sea Jules Verne.	\$ 5.75
The Time Machine H.G. Wells.	\$ 4.95
The Invisible Man H.G. Wells.	\$ 5.45
The War of the Worlds H.G. Wells.	\$ 4.95
Common Sense Tom Paine.	\$ 4.95
Walden / On the Duty of Civil Disobedience Henry David Thoreau.	\$ 6.45
The Edinburgh Lectures on Mental Science Judge T Troward.	\$ 7.95
A Study in Scarlet Sir Arthur Conan Doyle.	\$ 5.75
The Sign of Four Sir Arthur Conan Doyle.	\$ 5.75
The Adventures of Sherlock Holmes Sir Arthur Conan Doyle.	\$ 5.75
The Memoirs of Sherlock Holmes Sir Arthur Conan Doyle.	\$ 5.75
The Return of Sherlock Holmes Sir Arthur Conan Doyle.	\$ 5.75
The Hound of the Baskervilles Sir Arthur Conan Doyle.	\$ 5.75
The Valley of Fear Sir Arthur Conan Doyle.	\$ 5.75
The Thirty-Nine Steps John Buchan.	\$ 4.95
Alice's Adventures in Wonderland Lewis Carroll.	\$ 4.95
Through the Looking-Glass Lewis Carroll.	\$ 5.75
The Wonderful Wizard of Oz L. Frank Baum.	\$ 5.75
Peter Pan Sir James M. Barrie.	\$ 5.75
Frankenstein Mary Shelley.	\$ 5.75
The Strange Case of Dr. Jekyll and Mr. Hyde Robert L Stevenson.	\$ 4.95
Dracula Bram Stoker.	\$ 6.45
The Picture of Dorian Gray Oscar Wilde.	\$ 5.75
The Turn of the Screw Henry James.	\$ 4.95
Heart of Darkness Joseph Conrad.	\$ 7.95
As Seen by Me Lilian Bell.	\$ 8.75
Three Men in a Boat (to say Nothing of the Dog) Jerome K. Jerome.	\$ 8.75
Ethan Frome Edith Wharton.	\$ 7.95
The Four Million O. Henry.	\$ 8.75
The Red Badge of Courage Stephen Crane.	\$ 5.75
On Hazardous Service - Scouts & Spies of the North & South	
William Gilmore Beymer.	\$ 9.95
Love, War and the Movies Paul F. Peacock.	\$ 8.75
The Call of the Wild Jack London.	\$ 4.95
White Fang Jack London.	\$ 5.75
The Jungle Book Rudyard Kipling.	\$ 5.75
Kim Rudyard Kipling.	\$ 6.45
Memoirs of A Woman of Pleasure (Fanny Hill) John Cleland.	\$ 7.45
Robinson Crusoe Daniel Defoe.	\$ 6.45
Tarzan of the Apes Edgar Rice Burroughs.	\$ 5.95
The Great Impersonation E. Phillips Oppenheim.	\$ 5.75
A Tale of Two Cities Charles Dickens.	\$ 6.45
Riders of the Purple Sage Zane Grey.	\$ 5.45
Wuthering Heights Emily Brontë.	\$ 5.75

In any event, the collection was interesting. The complete Constitution of the United States was there and easy to browse using the reader. George Washington was surprisingly erudite. The Mayflower Compact was quaintly spelled. And in spite of my aforementioned reluctance to cede literature to the phosphor tanned, it was interesting.

Advantage USA is really in the business of selling you electronic versions of public domain novels and works long out of print at fairly moderate prices. The accompanying table lists their current title list as of May. And it is pretty inclusive. We've seen no one offer this large a collection of full text electronic format works.

I'll confess I wouldn't mind having any number of these, but actually, now that I think of it, I do. And I could have them in paper back at will at about those same prices. Still, they might serve some use in electronic form to analyze certain patterns. In any event, it is the most impressive collection of electronic full text titles we've seen. The documents can be ordered on diskette through the bulletin board, or downloaded. And the overall ease of downloading the free reader, ordering the books, and using them, is unique from what we've seen.

There is one real market for such books. Vision impaired/blind individuals who use personal computers with a text-to-speech synthesizer will love the service. And Advantage USA offers a slightly different reader for \$24.95, including four titles, that uses straight BIOS calls to display text that works well with these speech devices. Naturally, the company heralds the product as the wave of the future. Perhaps. But I don't think so. Electronic text will serve a purpose, but I doubt it will displace the sale of over a dozen books in the next twenty years. Advantage International, PO Box 773425, Houston, TX 77215; (713)977-1719 fax/answer machine; (713)977-9505 BBS.

THIS MONTH: OS/2 BULLETIN BOARDS

The early versions of OS/2 just didn't quite catch on. But it did develop a small, ardent band of followers - faithful to the end. And a few of them put up bulletin board systems to cater to interest in the operating system and carry a thousand or so OS/2 specific files. After years of obscurity, their day in the sun has arrived with the release of OS/2 Version 2.0 on the last day of March of this year. By late May, you could hardly get a line into one of these systems.

Dave Fisher of Tulsa Oklahoma does it about as well as anyone with a system titled LiveNet operating at (918)481-5715 in Tulsa Oklahoma advertising itself as "Tulsa's OS/2 Warehouse." The system uses Scott Dudley's MAXIMUS BBS software in the latest 2.01 version updated for use with version 2.0 of OS/2 itself.

The system is 1:170/110 in the International FidoNet and carries nearly 100 echos. We found OS2LAN and OS2BBS echos most interesting from a number of aspects. The hard core grassroots BBS element is wrestling with OS/2 vigorously right now trying to figure out how to do most everything in communications. You can listen in on this OS2BBS conference to good effect.

The system is also part of a File Distribution Network specifically for OS/2. Originating on Emmitt Grove's Fernwood BBS in Branford, Connecticut at (203)483-0348, this network automatically distributes 1/2 MB to 2 MB of new OS/2 related shareware and public

domain files each week to participating BBSs around the world. Titled OS2NEW, the net gets these files out quite quickly and efficiently.

Fisher's system sports some 650 MB of storage and a very complete selection of OS/2 files. We found some very interesting communication programs including a program to provide full screen remote access to OS/2 by dialup, a version of BinkleyTerm (a popular Fido mail program) for OS/2, and the full MAXIMUS BBS files. We also found a driver for Digiboard's PC/4 and PC/8 multiport serial cards allowing you to deal with up to 8 RS-232 serial ports under OS/2.

Fisher got involved with OS/2 about two years ago. A private contractor/consultant, he needed multitasking and background communications for a number of projects he was working on at the time. It came down to VAX/VMS or OS/2 and so he looked into OS/2. Despite the early problems with the operating system, he fell in love with it. According to Fisher, OS/2 is the ultimate BBS operating system.

Fisher is also the keeper of the list. He maintains a list of bulletin boards focusing on the OS/2 operating system and appears to update it quite regularly. The latest version we saw was in the file OS2WORLD.Z35 - updated May 14th. With Mr. Fisher's permission, we duplicate it here. Dave Fisher, LiveNet BBS, 5131 East 88th Court, Tulsa, OK 74137; (918)481-5779 voice; (918)481-5715 BBS.

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Bullet BBS	(203) 329-2972	9600	CT	Steve Lesner
Excelsior, The	(203) 466-1826	14.4	CT	Felix Tang
Fernwood	(203) 483-0348	9600	CT	Emmitt Dove
Ascii Neighborhood I &	(203) 934-9852	9600	CT	Bob Morris
Sno-Valley Software Exc	(206) 880-6575	9600	WA	LeRoy DeVries
Nibbles & Bytes	(214) 231-3841	9600	TX	Ron Bemis
Live-Wire	(214) 307-8119	9600	TX	Robert McA
U.S. Telematics	(215) 493-5242	9600	PA	Richard A. Press
System-2 RBBS	(215) 631-0685	9600	PA	Ed Barboni
Quantum Leap	(215) 967-9018	2400	PA	Louis F. Ursini
Ackron Anomoly, The	(216) 688-6383	9600	OH	Mark Lehrer
Play Board, The	(219) 744-4908	9600	IN	Jay Tipton
Singing Bear BBS	(302) 984-2238	9600	DE	John Tarbox
University of Saskatche	(306) 966-4857	14.4	Can	Kevin Lowey
I CAN! BBS	(312) 736-7434	9600	IL	Bogie Bugsalewicz
OS/2 Woodmeister, The	(314) 446-0016	14.4	MO	Woody Sturges
Catacombs, The	(317) 525-7164	9600	IN	Mike Phillips
Information Overload	(404) 471-1549	9600	GA	Ed June
IBM National Support Ce	(404) 835-5300	9600	GA	n/a
SandDollar, The	(407) 784-4507	9600	FL	Mark Wheeler
AsmLang and OS/2	(408) 259-2223	14.4	CA	Patrick O'Riva
Lee's Lounge	(410) 721-9452	14.4	MD	James Chance
SeaHunt BBS	(415) 431-0473	14.4	CA	Mechael Nelson
iKon View	(416) 635-1400	2400	Can	Herbert Kowalczyk
RT Labs	(416) 867-9663	9600	Can	Peter Fitzsimmons
Multi-Net	(503) 883-8197	9600	OR	Paul Breedlove
HelpNet of Baton Rouge	(504) 273-3116	9600	LA	Stan Brohn
Oberon Software	(507) 388-1154	14.4	MN	Brady Flowers
Gecko Control	(509) 244-0944	9600	WA	Rodney Lorimor
Home Front BBS	(514) 769-5174	2400	Can	Chris Ange-Schultz
Nibble's Roost, The	(604) 244-8009	14.4	Can	Alec Herrmann
The CAGE	(604) 261-2347	2400	Can	Brian P. Hampson
Idle Task, The	(604) 273-5588	14.4	Can	Gerry Rozema
Bear Garden	(604) 533-1867	9600	Can	Tony Bearman
Capital City BBS	(609) 386-1989	14.4	NJ	Bob Germer
Locutory, The	(613) 722-0489	9600	Can	Jerry Stevens
OS/2 Connection	(619) 558-9475	14.4	CA	Craig Swanson
Cajon Zone OS/2	(619) 588-6634	9600	CA	Jim Dailey
Communitel OS/2 BBS	(702) 399-0486	14.4	NV	Dennis Conley
Systems Exchange, The	(703) 323-7654	9600	VA	Bill Andrus
OS/2 Shareware	(703) 385-4325	9600	VA	Pete Norloff
Max's Doghouse	(703) 548-7849	2400	VA	Joe Salemi
GREATER CHICAGO Online!	(708) 895-4042	9600	IL	Bill Cook
Roach Coach, The	(713) 343-0942	14.4	TX	David Dozier
Soldier's Bored, The	(713) 437-2859	9600	TX	Art Fellner
COMM Port One	(713) 980-9671	14.4	TX	Bob Juge
Omega-Point BBS	(714) 963-8517	2400	CA	Unknown
Socialism OnLine!	(719) 392-7781	9600	CO	Randy Edwards
PMSC OnLine Resource	(803) 735-6101	2400	SC	Paul Beverly

OS/2 RELATED BULLETIN BOARDS

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Ruck's Place/2	(817) 485-8042	14.4	TX	Ken Rucker
WSI BBS	(901) 386-4712	2400	TN	Unknown
Looking Glass, The	(901) 872-4386	9600	TN	Edward Owens
Other World, The	(904) 893-2404	9600	FL	Troy Kraser
Monster BBS, The	(908) 382-5671	9600	NJ	Bob Hatton
Sorcery Board BBS, The	(908) 722-2231	9600	NJ	B.J. Weschke
LiveNet	(918) 481-5715	16.8	OK	Dave Fisher
Asylum BBS, The	(918) 832-1462	9600	OK	Bill Schnell
Psychotronic BBS	(919) 286-7738	9600	NC	Richard Lee
The TJD Support BBS	+31-1720-38558	9600	Net	Dave Jones
INFOBOARD	+31-4752-6200	2400	Net	Joop Mellaart
PC-Square	+31-79-424107	14.4	Net	Marcel Stikkelman
Os/2 MANiA BELGIUM	+32-2-3872021	9600	Bel	Benoit HUON
Hellfire	+32-2-7515203	9600	Bel	Danny Bruggeman
Moving Sound OS/2 BBS	+32-3-3850748	14.4	Bel	Bas Heijermans
Os/2 MANiA (Help Maximu	+33-164-090460	9600	Fra	Emmanuel Sando
Italy Network	+39-11-8180069	9600	Ita	Luigi Ravina
Runnin' with The Devil	+39-363-302798	9600	Ita	Roberto Sonzogn
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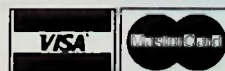
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Kitsap County Washington	Michael Schuyler	Quicksilver BBS	(206)780-2011
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National Adult BBS List	Clayton Manson	Titan BBS 1:3612/140	(904)476-1270
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NY/NJ/CT/PA/DE		Network One BBS	(212)628-5486
Ontario Area 705	Alex Draper	Cottage Country BBS	(705)835-6192
Open Access UNIX Site List	Phil Eschallier	LGNP1 (login:BBS)	(215)348-9727
Orlando Florida AC 407	Matt Drury	London BBS	(407)423-5226
OS/2 BBS Systems	Pete Norloff	OS2/Shareware BBS	(703)385-4325
OS/2 Related BBS	Dave Fisher	LiveNet 1:170/110	(918)481-5715
Portland Oregon BBS	Lisa Gronke	DawGone Disgusted	(503)297-9145
Raleigh NC Area Code 919	Mike Stroud	Micro Message Svc.	(919)779-6674
Republic of South Africa	Henk Wolsink	Catalyst BBS	(041)34-1122
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Computers & Dreams BBS (212)888-6565 New York New York since 01/91. Sysop: William Stewart. Using PCBoard 14.5a/E6 with 6 lines on MS-DOS 80486 with 760 MB storage. U.S. Robotics at 14400 bps. No fee. New York City's Best BBS! You don't believe us? Well call and find out for yourself. It's FREE. How can you go wrong? Dozens of GAMES, thousands of FILES, USA Today & Boardwatch Magazine Online, WorldNet MAIL, lots of prizes, CD-Rom drives and much more.

The Seeker's Place (215)237-6628 Darby Pennsylvania since 12/90. Sysop: Anthony Phillips. Using WildCat v3.5 with 3 lines on MS-DOS 80386 with 2010 MB storage. U.S. Robotics at 19200 bps. No fee. One of the Best animations collections on the East Coast. Programming & Windows support, large games area, over 750 Doors, Business files, Music, Database & Financial, Etc. CD-ROM Online. A General BBS with something for everyone. Member of N.N.C.S.

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Boundary Waters BBS (218)365-6907 Ely Minnesota since 04/01. Sysop: Gary Knopp. Using QuickBBS 2.75 with 2 lines on MS-DOS 80386 with 130 MB storage. Supra at 14400 bps. No fee. Complete information for Northwoods recreation, Boundary Waters Canoe Area, Superior National Forest, Wilderness Canoe Trips, Fishing, Boating, Camping, Sleddog Trips, Cross country skiing, Resorts, Northwoods Catalog Sales. FREE

Stoic Financial BBS (303)238-0588 Wheat Ridge Colorado since 08/91. Sysop: Richard Hiatt. Using WildCat 1.03 with 1 line on MS-DOS 80386 with 120 MB storage. Hayes at 2400 bps. No fee. Financial Information on all markets, commodities, stocks, futures and options. Gif charts, spreadsheet ready templates, 1-2-3 ready price history files. Dir. of Investment & Trading Professionals. Educational & Technical info on trading strategies.

THE GaRBaGe DuMP BBS (303)457-1111 Albuquerque New Mexico since 12/90. Sysop: Dean Kerl. Using Galacticom MBBS 3.51 with 35 lines on MS-DOS 80486 with 635 MB storage. Supra at 9600 bps. No fee. Join Denver's newest and hottest adult BBS - Be one of the "Adults at Play". We offer realtime adult chat, tons of files, multiplayer games and special message areas. We are an ASP BBS and "PC Pursuitable". In Albuquerque, NM call (505)294-5675.

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Clark Development Company, Inc., developer of PCBoard BBS Software, has made a standing offer to pay 50% of the cost of any classified advertisement in *Boardwatch Magazine* placed by any BBS that notes their use of PCBoard 14.5A Software. Your cost for an ad here: \$12.50 per month

The Comm-Post (303)534-4646 Denver Colorado since 06/86. Sysop: Brian P. Barte. Using TBBS 2.2M with 8 lines on MS-DOS 80386 with 2500 MB storage. U.S. Robotics at 14400 bps. \$50 Annually fee. An ASP-Approved BBS with one of the finest collections of IBM-Compatible Shareware. Many areas have free download access including an extensive library of Astronomy Software & Data files. Access to hundreds of Message Echos. VISA/MC/AMEX/DISCVR Welcome.

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Sound Doctrine Church's BBS (303)680-7209 Aurora Colorado since 01/87. Sysop: Tim Williams. Using TBBS 2.2M with 3 lines on MS-DOS 80386 with 700 MB storage. Supra at 9600 bps. No fee. For serious Christianity only! Where non-believers can ask the questions their Christian friends wish they wouldn't. Free items can be ordered while on-line. Look for the women's echo called Adam's Rib and our international echos. Find out who equals 666

Rocky Mountain Information Exchange (303)791-4330 Highlands Ranch Colorado since 08/82. Sysop: Larry Kayser. Using TBBS 2.2M with 4 lines on MS-DOS 80486 with 1200 MB storage. U.S. Robotics at 19200 bps. \$49.95 Annually fee. Featuring multi-user games. Social, Technical and Adults only worldwide message areas and multi-line "CB" chat areas. Social and Adults only matchmakers. 1, 3, 6, and 12 month memberships available. Limited free access. Registration required.

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AIS Multiline (604)489-4206 Cranbrook, BC Canada since 03/89. Sysop: Chris Pinnell. Using Galacticom 5.3 with 4 lines on MS-DOS 80386 with 800+ MB storage. U.S. Robotics at 14400 bps. \$1.00 Hourly fee. A great place to meet new people, AIS Multiline is one of the fastest growing BBSes in western Canada, offering 2 CD Roms to download from, as well as the latest files from ASP authors, Teleconferencing, friendly users, on-line games - ASK FOR FREE TIME

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Digicom BBS (812)479-1310 Evansville Indiana since 05/85. Sysop: Gary Barr. Using Remote Access Pro V1.11 with 5 lines on MS-DOS 80486 with 1700 MB storage. U.S. Robotics at 19200 bps. \$20 Annually fee. Large MS-DOS, Amiga, Mac collection with DigiScan GIF's, ComedyLine, Fido, Rime, ThrobNet Echos, USA Today & 15+ Magazines, Visiting SysOps, Movie News, Online Mall, News & Weather, Adult Doors, Women Only Section, You can get FULL access on first call.

Micro Message Service (919)779-6674 Raleigh North Carolina since 10/82. Sysop: Michael M. Stroud. Using TBBS 2.2M with 10 lines on MS-DOS 80386 with 5200 MB storage. U.S. Robotics at 19200 bps. \$45.00 Annually fee. NC's # 1 online info service support for PC, Mac, Amiga and Atari ST. Hundreds of new files added weekly. Expert leaders for each SIG. Authorized eSoft dealer, system design and TDBS programming. Give your online system a leading edge, call us first.

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BOARDWATCH MAGAZINE

LIST OF BBS SOFTWARE VENDOR PRODUCT SUPPORT/DEMO BULLETIN BOARD SYSTEMS - JULY 1992

PRODUCT	COMPANY	BBS PHONE	NOTES	VOICE	MAILING ADDRESS
IBM/DOS					
DCI	Nordevald Software	(813)961-0788	DOS		POB 280138, Tampa, FL 33682
DLX	Inner Loop Software/Baudtown	(818)893-7600	Multiline - 32 lines - excellent chat/social system.	(818)893-2321	17939 Chatsworth St. #192, Granada Hills, CA 91344
Falken	Info Share	(703)883-8000	DOS/Multiline-16 lines-runs ext programs		P.O. Box 1501, Woodbridge, VA 22193
Fido	Tom Jennings	(415)803-2739	DOS/Single Line - Original Fido BBS Software	(415)861-7183	Box 77731, San Francisco, CA 94107
FSUUCP	Chris Ambler, Fubar Systems	(805)543-8227	Interne/UNIX Communications for DOS machines		1742 Lima Drive, San Luis Obispo, CA 93405
GAP	GAP Development Co.	(714)493-3819	DOS/LAN 99 Nodes - Fast ISAM Searches		24242 Porto Fino, Laguna Niguel, CA 92677
Genesis BBS	Carter Downer	(315)592-7300	DOS/LAN - Multinode - Flexible Doors		Box 267, Hannibal, NY 13074
InfoHost	A-Comm Electronics Inc.	(201)288-7792	DOS/Multiline - Database	(201)288-7885	377 Route 17 South, Hasbrouck Heights, NJ 07604
Kitten	System Enhancement Assoc.	(201)473-1991	DOS/Single Line - also SEADog Fidonet Mail Program	(201)473-5153	21 New Street, Wayne, NJ 07470
Major BBS	Galacticomm, Inc.	(305)883-7808	DOS/Multiline - 255 lines-chat-multituser games	1 (305)583-5990	4101 SW 47th Ave #101, Ft Lauderdale, FL 33314
Maxihost	Don Markin	(209)836-2402	DOS/Single Line - Small, Easy to Run		231 Market Place, San Ramon, CA 94583
Opus-CBCS	Opus-CBCS Development	(412)366-5208	FidoNet compatible BBS - multi-node.	(412)364-4017	8024 Crest Road, Pittsburgh, PA 15237
Oracomm	Surf Computer Services	(619)346-1608	DOS/Multiline - 32 lines - social chat	(619)346-9430	71-540 Gardess Rd., Rancho Mirage, CA 92270
Osiris	Micro Tech	(314)334-6359	DOS/LAN Multinode - 256 lines - Online Store	(314)335-5384	Cape Girardeau, MO 63701
PCBoard	Clark Development Company	(801)261-8976	DOS/LAN-99 Nodes-Popular BBS for shareware BBS	(800)356-1686	PO Box 7135, Murray, UT 84107
QuickBBS	Creighton/Gabrilowitz	(407)896-0494	DOS/Single Line - Shareware clone of TBBS		POB 678255, Orlando, FL 32867
RBBS	Ken Gossens	(703)978-6360	DOS/LAN Multinode - Free - BASIC Source Avail	(703)978-4339	5020 Portsmouth Rd., Fairfax, VA 22032
Sapphire	Tim Campbell/Pinnacle Soft	(514)345-8654	Easy Installation and Setup - Single Line Package	(514)345-9578	Box 714 Airport Road, Swanton, VT 05488
Searchlight	Searchlight Software	(516)889-2566	DOS/LAN - Multinode - Visual and easy to use	(516)751-2966	PO Box 640, Stony Brook, NY 11790
Spiffire	Mike Wolz	(515)225-8496	DOS Single Line		313 39th St., W.DasMoines, IA 50265
TAG	Paul Williams	(313)582-6671	Support for TAG BBS Software		Dearborn, MI
TBBS	eSoft Inc.	(303)699-8222	DOS/Multiline - 64 lines per machine - good database	(303)699-6565	15200 E Girard Ave # 2550, Aurora, CO 80014
Tritel	Mark Goodman	(207)941-0805	DOS Multi-Node - Fido capable - offline mail		PO Box 187, Orland, ME 04472
UFGATE	Tim Pozar	(415)895-0759	Utility to import/export Usenet News from Unix Systems	(415)695-7727	671 28th St., San Francisco, CA 94131
Wildcat!	Mustang Software	(805)395-0650	DOS/LAN/250 Nodes - Very good on LAN installations	(805)395-0223	3125 19th St Ste 162, Bakersfield, CA 93301
WWIV	Wayne Bell	(213)208-6689	DOS/Single Line - C source available with registration		904 Silver Spur Rd. #636, Rolling Hills Est, CA 90274
APPLE/MACINTOSH					
Proline	pro-sol/Morgan Davis	(619)670-5379	Apple II/GS - Unix lookalike BBS - Usenet News	(619)670-0563	10079 Nueño Ln, Rancho San Diego, CA 92078
First Class	SoftArc, Inc.	(416)609-2250	Multiline Macintosh BBS Package	(416)299-4723	805 Middlefield Road, Ste. 102, Scarborough Ontario,
Hermes	Frank Price/AOC Software Inc.	(213)275-6975	.MAC - Multiline BBS for Macintosh - Very good		612 Doheny Road, Beverly Hills, CA 90210
Mansion	Michael Pester, Software	(515)279-6769	Macintosh BBS package	(515)276-9650	PO Box 12016, Des Moines, IA 50312
Novalink Pro	Len Anderson - ResNova Soft	(714)840-8641	.24-Line Mac BBS Package - Graphics/VT-100	(714)840-6082	16458 BolchaChica Street St 193, Huntington Bch, CA
Sight	Scott Watson, FreeSoft Co.	(412)846-5312	Single Line BBS Software for Macintosh	(412)846-2700	105 McKinley Road, Beaver Falls, PA 15010
Tabby	Michael E. Connick	(201)988-0706	.MAC - Fidonet Mail Interface for Macintosh		PO Box 307, Bradley Beach, NJ 07720
Telefinder	Rusty Tucker, Spider Island Soft	(714)730-5785	Multiline Macintosh BBS - up to 20 lines	(714)669-9260	4790 Irvine Blvd. Ste.105-347, Irvine, CA 92720
UNIX					
CocoNet	Coconut Computing, Inc.	(619)456-0815	Unix - Hires Graphics like Prodigy - term program	(619)456-2002	7946 Ivanhoe Ave Ste 303, La Jolla, CA 92037
TEAMate	MMB Development Corp.	(213)318-5302	Unix/Multiline - VT100 ANSI Graphics	(800)832-6022	904 Manhattan Ave., Manhattan Beach, CA 90266
XChange	Z/Max Computer Solutions Inc.	(315)635-1947	Unix - Pull Down Menus/Pop-up Windows	(315)635-1882	8287 Loop Road, Baldwinsville, NY 13027
Magpie	Steve Manes	(212)420-0527	DOS/UNIX Conferencing Software with unique threading	(212)533-1692	648 Broadway, Ste 300, New York, NY 10012
WAFFLE	Darkside International	(408)245-7726	DOS/UNIX - Provides UUCP function for DOS machines		PO Box 4436, Mountain View, CA 94040
OS/2					
Magnum BBS	Chuck Gilmore	(818)706-9805	OS/2/LAN-8 Lines per computer - looks like PCBoard	(818)706-9800	1285 Falling Star Ave., Thousand Oaks, CA 91362
Maximus-CBCS	Scott Dudley	(613)389-8315	FidoNet compatible BBS - multi-node		777 Downing Street, Kingston Ontario, Canada K7M 5
Multi-Net	Multi-Net Communications	(503)883-8197	Multi-Line OS/2 BBS Package	(503)883-8099	15702 Black Bear Ct., Klamath Falls, OR 97601
WINDOWS					
PowerBBS	Russel Frey	(516)822-7396	Runs under Windows 3.1	(516)938-0506	35 Fox Ct., Hicksville, NY 11801

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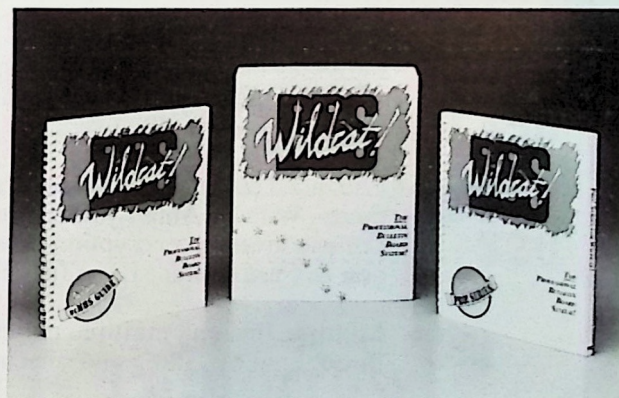
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TBBS 2.216 Line BBS.....	699.00
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BOARDWATCH MAGAZINE

NATIONAL LIST OF ELECTRONIC BULLETIN BOARD SYSTEMS AND ON-LINE INFORMATION SERVICES - JULY 1992

SERVICE	PHONE	DESCRIPTION	SPONSOR/SYSOP	LOCATION
65' North	(907)452-1460	DESQview Utilities File Distribution Network 1:17/38	Peter Stern	Fairbanks, AK
ADA 9X Project Bulletin Board	(800)232-9925	ADA Programming Language Revisions and News	Chris Anderson/Susan Carlson	Eglin AFB, FL
ADA Information Clearinghouse	(703)614-0215	Information on ADA Programming Language/Military Specs	Department of Defense	Washington, D.C.
Advanced Data Services Inc.	(301)695-9116	22 line PCBoard with 5.5 GB of Files	Blaine Brodka	Fredrick, MD
American Cybernetics BBS	(602)968-1082	Multi-Edit Product Support BBS	American Cybernetics	Tempe, AZ
ANARC BBS	(913)345-1978	World Radio/TV Handbook - Short Wave Freq Lists/Scheds.	Assoc. of North American Radio Clubs	KS
APCUG - GlobalNet	(408)439-9367	Association of PC User Groups - Over 2000 UG officers	Paul Curtis/APCUG	Scotts Valley, CA
Applied Modeling Research RBBS	(919)541-1325	Environmental Protection Agency Atmospheric Models	William Peterson/EPA	Hurdle Mills, NC
Aquila BBS	(708)820-8344	6 GB 25 Nodes Fidonet/Interlink/Metronet MCE IL/CHI Graphics	Kevin Behrens/Steve Williams/Doug Bell	Torrance, CA
Ashton-Tate Technical Support	(408)431-2275	dBase and Multimate Support - CIS HOST NAME:ATBBS	Ashton-Tate Corporation	Irvine, CA
AST Technical Services BBS	(714)727-4723	Superb support system for AST Computer Products	AST Research Inc.	Plainfield, NJ
AT&T Support BBS	(908)769-6397	Support for PC 6300 and Other AT&T PC Models	American Telephone/Telegraph PC Division	Scarborough, Ontario
ATI Support BBS	(416)756-4591	Support for ATI Modems and Video Cards	ATI Technologies	Mira Loma, CA
Attention to Details	(714)681-6221	Utilities/ASP/Patrinquin Utilis/Protocols	Clint Bradford	Van Nuys, CA
Audiofile Network	(818)988-0452	High-end Audio Components, Music, Video Reviews	Guy Hickey/Quatre Speakers	Cincinnati, OH
Automobile Consumer Services	(513)624-0552	New Car Pricing Reports - Used Car Value Reports	Automobile Consumer Services Inc.	Lutherville, MD
AviTechnic 1:261/662	(301)252-0717	Software Distribution System - BBS Utilities	Tom Hendricks	Richardson, TX
BBS America	(214)680-3406	Home of DFW Online Electronic Newsletter	Jay Gaines	Boca Raton, FL
BBS Press Service	(913)478-9239	Home of Online Digital Music Review	Alan Bechtold/BBS Press Service	Topeka, KS
Best Friends BBS	(714)828-7093	DLX Multiline Chat/Match Social/Sexual	Ann and Joe Wiseman	Fountain Valley, CA
Big Peach BBS	(404)446-6650	Home of Automenu and Treeview Software	Marshall Magee/Magee Enterprises	Norcross, GA
Bird Info Network	(303)423-9775	Breeding, Raising, Taming, Exotic Birds	Terry Rune/Dave McClaugage	Arvada, CO
BMUG BBS	(510)849-2684	Support for Macintosh owners - files - conferences.	Berkeley Macintosh Users Group	Berkeley, CA
Boardwatch Magazine Online Info	(303)973-4222	Distribution Service for USA Today/Boardwatch/Closing NYSE	Boardwatch Magazine	Littleton, CO
Boca Research Support BBS	(407)241-1601	Support BBS for Boca Modems	Boca Research Inc.	Boca Raton, FL
Book BBS	(215)667-6130	Information on 2000 Computer Books - 800 order number	Business & Computer Book Store	Willow Grove, PA
Bruford Download BBS	(408)439-9096	Utilities, Macros, Programming Examples for Borland Products	Borland International/Mike Fitz-Enz	Scotts Valley, CA
Bruce's Bar & Grill	(203)236-3737	24-line Social System - Chat - Games - Downloads	Bruce Lomasky	West Hartford, CT
Bucks Telematics 273/201	(215)493-5242	Local, National, International Message Conferences	Richard Press	Yardley, PA
C.A.R.L. Library Service	(303)863-1350	Citations to 4 Million Texts in Colorado Library System FREE	Colorado Alliance of Research Libraries	Denver, CO
CAD/Engineering Service	(615)824-4938	Computer Aided Design File Distribution Network 1:116/32	Stan Binson	Hendersonville, TN
Canada Remote Systems	(416)798-4713	23GB/400000+ files, 3500 Conf's, USENET, IBM/Amiga/Mac	Jud Newell	Mississauga, Ontario
Capital PC User's Group BBS	(301)738-9060	One of the oldest PC User's Groups - 5500 members	Capital PC Users Group/Roger Falman	Rockville, MD
Castle Tabby 107/412	(908)988-0706	Home of TABBY Fidonet Interface Program for Apple Macintosh	Michael E. Connick	Bradley Beach, NJ
Celebration Station	(207)374-5161	Adventure Games, Chat, and Sigs - Children	Noel Stookley (Paul of Peter, Paul & Mary)	Blue Hill Falls, Maine
Census Bureau Office Automation	(301)763-4576	Microcomputers and Office Automation	US Dept. of Commerce/Nevins Frankel	Suitland, MD
Central Point Software	(503)690-6650	PC Tools - Central Point Anti-virus support board	Central Point Software Inc.	Beaverton, OR
Channel 1	(617)354-8873	70-line PCBoard - 8 GB Files - Internet - 1000's msg. confs.	Brian Miller/Tess Heder	Cambridge, MA
Chicago SysLink	(312)622-4442	Special Interest Areas for Ferret/Pet Owners. TRS80/Aviation	George Matyaszek	Chicago, IL
chinet	(312)233-0559	UNIX System offering Internet Mail	Randy Suess	Chicago, IL
Classi Computer Fieds	(317)359-5199	Online System for Classified Advertisements	Steve Edsall/Trader Newspaper	Indianapolis, IN
Classified Connection BBS	(619)536-7347	Gifts Girls - Nude GIF Images of the Girl Next Door	Bill Kennon	San Diego, CA
Cleveland Freetnet	(216)368-3888	Cleveland City Information/Ohio Governor's Office Online	Case Western University/AT&T/Ohio Bell	Cleveland, OH
CocoNet	(619)456-0815	CocoNet Support/Demo - Hires Graphics BBS for Unix Systems	Brian and Patricia Dear	La Jolla, CA
Comm-Post, The 104/666	(303)534-4846	Astronomy - 725+ MB of Files	Brian Bartee	Denver, CO
Community News Service (CNS)	(719)520-5000	News and Entertainment - 17 Lines Community Focus	Klaus Dimmler	Colorado Springs, CO
Compact Audio Disk Exchange	(415)824-7603	Buy/Sell/Trade Compact Audio Disks Online	Wayne Gregori	San Francisco, CA
Computer Garden	(301)546-1508	Treasure Hunting - Metal Detectors - Online Catalog	Milford P. Webster	Salisbury, MD
Computerized Bulletin Board Sys	(708)849-1132	First Electronic Bulletin Board - Creator of XMODEM Protocol	Ward Christensen	Chicago, IL
Computing Canada Online	(416)497-5263	Adjunct to Excellent Canadian PC Newspaper	Computing Canada Newspaper	Willowdale, Ontario
Corporate Data Exchange (CDX)	(609)683-4422	PR Newswire/ Business Wire. Logon: hello user:cdx	LaFountain Research Corp/Tad LaFountain	Princeton, NJ
CrossTalk Communications BBS	(404)740-8428	Product Support for Crosstalk for Windows/MK4/XVI	Digital Communications Associates	Roswell, GA
CTC IEEE Employment Database	(508)263-3857	Online Database of 20,000 Resumes for Engineering	Career Technologies Corporation	Andover, MA
Cul-de-Sac Bar & Grill	(508)429-1784	Multiline Service - Ham Radio - Humor - TDBS Applications	Pete White	Holliston, MA
CyberStore - a COCONET BBS	(604)526-3676	All lines to v.32bis/v.42/v.42bis. CyberTools for BBS'es	CyberStore Online Info. Systems Inc.	New Westminster, BC
Dark Side of the Moon	(408)245-7726	Home of WAFFLE, Unix UUCP BBS Software for DOS and UNIX	Thomase E. Dell/Darkside International	Mountain View, CA
Data Core BBS	(213)842-6880	25 line Major BBS	Matthew Schoen/Delta Enterprises	Los Angeles, CA

DataLink RBBS System	(214)394-7438	Weather Satellite Imaging, NOAA Satellite Tracking-AMSAT-NA	Dallas Remote Imaging Group/Jeff Wallach	Carrollton, TX
Dawg Byte	(615)385-4268	ANSI Art Club 1:116/29	Kevin Snively	Nashville, TN
Denver Exchange, The 104/909	(303)623-4965	Denver's Most Diverse Gay/Lesbian Info Service	James Craig	Denver, CO
DragonNet 386/451	(409)765-5459	Multiline MAJOR BBS with 4 GB - 64 lines Interactive Games	Robert Michael/Dragon Profit Systems	Galveston Island, TX
East Bay X-Change 372/888	(803)556-7485	Home of XRS Offline Mail Reader	Mike Ratledge	McClellanville, SC
Echo	(212)989-8411	New York Emulation of THE WELL - Unix CAUCUS Conferencing	Stacy Horn/Echo Communications Group	New York, NY
Economic Bulletin Board	(202)377-3870	Economic Statistics/GNP/GPI/Employment, Trade Opportunities	US Department of Commerce	Springfield, VA
Ed Hopper's BBS	(713)997-7575	Home of uPCB - PCBoard Utility for UUCP Connections	Ed Hopper	Pearland, TX
Electric Ideas Clearinghouse	(206)586-6854	Energy Efficiency Efforts In Pacific Northwest-Hydro/Elec	Bonneville Power Administration WSE	Olympia, WA
Energy Info Admin E-Publications	(202)586-8658	Variety of Petroleum/Coal/Electricity Energy Statistics	US Department of Energy	Washington, D.C.
eSoft Product Support BBS	(303)689-8222	Home of The Bread Board System (TBBS) BBS Software	Phil Becker/eSoft Inc.	Aurora, CO
Event Horizons	(503)697-5100	64 Line Digitized Graphics Image Library - Adult .GIF files	Jim Maxey	Lake Oswego, OR
Exchange BBS, The	(713)521-2191	Largest Gay/Bi/Lesbian Multiline BBS in Houston	James Craig/John Fields	Houston, TX
EXE-PC	(414)789-4210	Largest BBS in US - 230 Lines - 70,000 files - 7 Gigabytes	Bob Mahoney	Elm Grove, WI
Executive Network	(914)667-4567	Interlink Netmail National Host - Multiline PCBoard System	Andy Keeves	Mt. Vernon, NY
Eye Contact BBS	(415)255-5972	22 line Oracom - Gay Issues - Popular Chat System	Bill Montgomery	Mill Valley, CA
Falken Support BBS	(703)803-8000	Support for FALKEN software - 16 lines - doors - chat	Herb Rose	Woodbridge, VA
Farwest BBS	(604)381-3934	NOAA Weather Satellite Images - Russian/Japanese Sat Pics	Ren L'Ecuier	Victoria, BC
FAX/Satellite Services BBS	(619)224-3853	Equipment Authorization Status Advisory Service	Scotty Olson	San Diego, CA
FCC Public Access Link	(301)725-1072	Federal Job Opportunity Lists available online	Federal Communications Commission	Columbia, MD
Federal Job Information Center	(313)226-4423	Info on Federal Libraries - Excerpts Library of Congress News	US Office of Personnel Management	Detroit, MI
FEDLINK ALIX II	(202)707-4888	The First Fido BBS and home of Fido BBS 12s	Federal Library Information Network	Washington, D.C.
Fido Software BBS 1:125/111	(415)863-2739	Fidonet Technical Information for Holland	Tom Jennings	San Francisco, CA
Fido Tech Stand	(313)307-35900	Gay Community BBS - AIDS Info - Desktop Publishing - MACs	J.J. van der Maas	Utrecht, Holland
FOG City BBS 125/10	(415)863-9697	Newspaper BBS - Wierdnet Newswire. List of MA Libraries	Bill Essex	San Francisco, CA
Fred the Computer	(508)872-8461	Desktop Publishing File Distribution Network 1:264/212	Middlesex News-Adam Gaffin	Framingham, MA
FreeBoard BBS, The	(804)744-0797	Home of FSUUCP and FSBBS - Unix Communications for DOS	Bill Hunter	Midlothian, VA
FSBBS Prototype System	(805)543-8227	Multiline Entertainment - 8 Lines Games/Chat/News	Chris Ambler, Fubar Systems	San Luis Obispo, CA
Fun Connection	(503)753-8431	Online Chat Service - Adventure Games - National Chatlink	Vincent Reece	Corvallis, OR
Garbage Dump, The	(505)294-5675	Novell Network/TCP-IP Shareware Utilities	Dean Kerl/Datasafe	Albuquerque, NM
Gateway Communications BBS	(714)863-7097	Outstanding IBM Shareware on a small system	Gary Gabrick	Irvine, CA
GDP Technologies	(303)673-9470	Popular File Library - CompuCom Modem Support Service	Tom Getty's	LaFayette, CO
General, The	(619)281-8616	Support for MAGNUM BBS - OS/2 BBS Software - up to 8 lines	Marc Teitler	San Diego, CA
Gilmore Systems BBS	(818)706-9805	Gay and Lesbian Information Bureau - 11 Lines - 9600 bps	Chuck Gilmore	Thousand Oaks, CA
GLIB	(703)578-4542	Ecological and Peace Issues - Disarmament/Toxics/Wildlife	Community Educational Svcs. Foundation	Arlington, VA
Greenpeace Environet	(415)512-9108	Customer Support Line for Hayes Customers. V-series/Ultra	Dick Dillman/Greenpeace	Norcross, GA
Hayes Advanced Systems Support	(800)874-2937	Community Online Service - Free Internet E-Mail Boxes	Hayes Microcomputer Products	Peoria, IL
Heartland Free-net	(309)674-1100	Reptile and Amphibian Studies - Poison Snakes/Toads/Fish	Peoria County Board/Bradley University	Philadelphia, PA
Herpnet/Satronics TBBS	(215)698-1905	MS Windows and OS/2 Files our specialty	Mark Miller	New Hartford, CT
HF Info-Net BBS	(203)246-3747	Amiga File Distribution Network 1:163/109	Lee Winsor	Ottawa, Ontario
Hystercs	(613)231-7144	IBM PC User Groups Database - Newsetter Exchange	Russell McOrmond	Atlanta, GA
IBM National Support Center BBS	(404)835-5300	Telephone Sales Trade Magazine Online Service	IBM National Support Center	New York, NY
Inbound/Outbound/Teleconnect	(212)989-4675	Excellent list of Atlanta BBS systems online	Harry Newton Publications	Bellevue, WA
Index Systems	(404)924-8414	Demo BBS for InfoHost BBS Software - Multiline - Database	Rodney Aloia	San Jose, CA
InfoHost Demo BBS	(606)271-6556	Space Database - Online Store - Chat	Daniel Diachun	Roswell, GA
Infolink for Upper East Tenn.	(201)288-7792	LAN Related Files and Utilities 1:124/6101	A-Comm Electronics Inc.	Hasbrouch Heights, NJ
Inns of Court, The	(214)456-2620	Support for Intel PC Products - Inboard 386/AboveBoard 286	John Williams	Johnson City, TN
Intel PCEO Support BBS	(503)645-6275	32 Lines - 100 Directories - Good Shareware Catalog 3.2 GB	Arthur Geffen	Dallas, TX
Invention Factory	(212)431-1194	Online Investment/Stock Market Information/Tech Analysis	Intel Corporation PCEO Division	Hillsborough, OR
Investor's Online Data	(206)285-5359	Navy Judge Advocate General's Information Network	Mike Sussell	New York, NY
JAG-NET	(703)325-0748	Online Hardware Order - Catalog - 1.1 GB Files - Quizzes	Don Shepherdson	Bellevue, WA
JDR Microdevices BBS	(408)559-0253	Online Job Listings - 2186 Technical Pos. - 10,000 Corps.	JDR Microdevices	San Jose, CA
JOBS	(404)992-8937	OPTIK, TEXT2COM, CBOOT, very good shareware utilities	Alpha Systems Inc./Bill Griffin	Roswell, GA
Keith Graham Shareware Support	(914)623-0039	Prime Rate-Fad Funds-T-Bill-Discount Rate-Economic Data	Keith P. Graham	Myack, NY
KIMBERLY BBS	(612)340-2489	400 MB Books, Writers Area - TRS 80 Support	Federal Reserve Bank of Minneapolis	Minneapolis, MN
King's Market BBS 104/115	(303)665-6091	Support for LANtastic local area network	Jim and Karen Burt	Boulder, CO
LANtastic BBS	(602)293-8065	Home of UFGATE - Software to connect PCs to UUCP/Usenet	Artisoft Inc.	Tucson, AZ
Late Night Software 125/555	(415)695-0759	Support for Leading Edge Computer Owners	Tim Pozar	San Francisco, CA
Leading Edge Auto Info Line	(508)836-3967	Legal Issues/Forms - Law BBS List	Leading Edge Computer	Westborough, MA
LegalEase	(509)326-3238	Macintosh Oriented Support BBS - 6 Lines - Infomat/BIX	Bill Sorcinelli	Spokane, WA
MAC-LINK	(514)935-4257		Mark Smith	Montreal, Quebec

BOARDWATCH MAGAZINE

NATIONAL LIST OF ELECTRONIC BULLETIN BOARD SYSTEMS AND ON-LINE INFORMATION SERVICES - JULY 1992

SERVICE	PHONE	DESCRIPTION	SPONSOR/SYSOP	LOCATION
Macalot Bulletin Board	(412)846-5312	Support for Second Sight BBS Software for Macintosh	Jeff Dripps/FreeSoft Company	Beaver Falls, PA
MacInternational	(803)798-3755	Largest MAC BBS on East Coast	Ralph Yount	Columbia, SC
Magpie BBS	(212)420-0527	Support/Demo System for Magpie BBS/Conferencing Software	Steve Manes	New York, NY
MaxiHost Support BBS	(209)836-2402	MaxiHost BBS - small, very easy to run BBS	Don Mankin	San Ramon, CA
McAfee Associates BBS	(408)988-4004	Computer Virus Information - VIRUSCAN and CLEANUP Programs	John McAfee/CVIA	Santa Clara, CA
METRO Online Entertainment	(212)831-9280	32 line DLX with City Guide/Ski Database - Matchmaker - Chat	Bruce Kamm/Metro Online Services	New York City, NY
Micro Foundry, The	(415)598-0398	2.2 GB Downloads - Your Online Software Source - Boardwatch	Thomas Nelson/Clockwork Software	San Jose, CA
Micro Message Service	(919)779-6574	USA Today/BoxOffice Magazine - Large Download Area	Mike Stroud	Raleigh, NC
Micro Tech BBS	(314)334-6359	Support for OSIRIS Multiline BBS Software - IRIS Mail	Micro Tech	Cape Girardeau, MO
Microlink B	(303)972-9600	Over 2.5 GB of IBM Software - Multiline - USA Today News	Girard Westerberg	Littleton, CO
Microsim Technical Support BBS	(206)649-9836	Support for Popular R:Base Relational Data Base System	Microsim Corporation	Redmond, WA
Microsoft Download BBS	(206)936-6735	Windows Technical Notes and Support Information	Microsoft Corp/Scott J. Honaker	Bellevue, WA
Microsystems Software Inc.	(508)875-8009	HandiWare Software for Handicapped - CodeRunner C Utilities	MSI - Reed Lewis	Framingham, MA
Midwest MIDI 1:147/1007	(405)733-3102	MIDI Distribution Net - MIDI sequences and files	John Fordenbacher	MWC, OK
MOG-UR'S EMS, The	(612)920-5566	Minnesota Space Frontier Society - NASA News	Ben Husset	Minneapolis, MN
Movie BBS	(818)366-1238	5 Lines - 8 Networks CD-ROMS - 2.8 GB Hub Services HSTV.32	Tom Timpidis	Granada Hills, CA
N.A.C.D. BBS	(718)939-5462	Movie Reviews and Information - Television	Clarke Ulmer	New York, NY
N8EMR Ham BBS	(912)246-3280	Cave Scuba Diving - Superb Special Topic System	National Assoc. of Cave Divers	Gainesville, FL
NAPLPS Graphics BBS	(614)895-2553	login:hbbs HAM Radio/AMSAT Unix System - Satellite/Packet	Gary Sanders	Westerville, OH
NARDAC BBS	(613)727-5272	NAPLPS Graphics Terminal and Editor Software	MicroStar Corp.	Nepean, Ontario
NASA Headquarters Info Tech	(804)445-1527	Zenith Computer Support - List of Federal Micro User Groups	Navy Regional Data Automation Center	NAS Norfolk, VA
NASA Spacelink	(202)453-9008	Shareware and Technical Info for NASA PC users.	National Aeronautical and Space Admin.	Washington, DC
Nashville Exchange	(205)895-0028	NASA Educational Affairs Div. - Flight Data/Space History	Marshall Space Flight Center	Huntsville, AL
National Agricultural Library	(615)383-0727	12 line TBBS - Games/TDBS Software Development 1.8 GB	Ben Cunningham	Nashville, TN
National Genealogical BBS	(301)344-8510	Agricultural Info/Research Resources	US Department of Agriculture	Beltsville, MD
NAVWESA	(703)528-2612	Family History - Genealogical Research - Gravestone Haunting	National Genealogical Society	Arlington, VA
Natcom Internet Guest System	(202)433-6639	Naval Weapons Engineering Support	Dept. of Navy / Bill Walsh	Washington, D.C.
Network World Bulletin Board	(408)241-9760	Internet Access System - type "guest" at login for info.	Netcom Online Communications Services	San Jose, CA
Neuropsychology Bound 157/3	(508)620-1178	LAN and WAN Issues and Technology	Network World Magazine/CW Communications	Framingham, MA
NIST ACTS	(216)356-1431	Support Groups for Disabled/Physically Impaired	Bulch Walker	Rocky River, OH
NIST Computer Security	(303)494-4775	Automated Computer Telephone Service - Sync PC to NBS Time	Nat. Institute for Standards/Technology	Boulder, CO
Nixpix	(301)948-5717	Computer Security and Virus Protection Issues	Nat. Institute for Standards/Technology	Gaithersburg, MD
NOAA Space Environment Lab	(303)920-1263	Large Library of Adult GIF Graphics Images	Nick De Wolf	Aspen, CO
NoGate Consulting	(303)497-5042	Solar Flare/Geomagnetic Data Online	National Oceanographic/Atmospheric Admin	Boulder, CO
Numisnet	(616)530-3392	Home of FAK archive utility	Mike Neuhaus Gus Smedstad	Grand Rapids, MI
OAGPSTTN	(301)498-8205	Collecting of Coins, Medals, and Exonumia	The Mitchell Group	Laurel, MD
OASIS BBS	(919)541-5742	Air Quality Planning and Standards Technology Transfer Net	Environmental Protection Agency	Research Triangle Park, NC
Occupational Health/Safety BBS	(404)627-2662	Home of Atlanta Bulletin Board List - ABBL	Robert Orr/Online Atlanta Society	Decatur, GA
Odyssey	(212)385-2034	Job Safety Issues for Artists, Musicians, Entertainers	Mike McCann/Center for Safety in Arts	New York, NY
Old Colorado City Communications	(818)358-6968	Adult Multiline Chat System - Games - Magazines - Downloads	Michael Allen	Monrovia, CA
Online Now	(800)222-4922	Educational Statistics and Data - Performance Stats -	US Department of Education	Washington, D.C.
Online With Hayes	(719)632-4111	Political Discussions - Unix UUCP Public Access - Multiline	Dave Hughes	Colorado Springs, CO
Oracle PC	(807)345-5522	700 Megs plus 5 CD-ROMS plus 6 MB New Software per Week	Gary Walsh/Tom Haavisto	Thunder Bay, Ontario
Oracom Support BBS	(404)446-6336	Hayes Public Bulletin Board - Conferences/SIGS/Support	Hayes Microcomputer Products	Norcross, GA
Osprey's Nest	6108 260-6222	South Australian TBBS Multiline System	Don Crago	Pooraka South Australia
P.D.S.O. BBS	(619)346-1608	Sales and Support for Oracom Multiline BBS Software	Surf Computer Services	Rancho Mirage, CA
PacComm BBS	(301)989-9036	Birdwatching, Bird feeding, Naturalist/Ecology issues	Fran and Norm Saunders	Colesville, MD
PC Ohio	(516)938-6722	Home of THE LIST National BBS List	James Toro	Hicksville, NY
PHYSICS Forum BBS	(813)874-3078	Shareware library with 100% USR HST access - 24 lines	Gwynn Reedy/PacCom Inc.	Tampa, FL
Pinnacle BBS 104/28	(413)545-1959	Physics and Astronomical Sciences	Norm Henke	Cleveland, OH
PKWare BBS	(303)642-7463	Large Shareware Library/Echomail Conferences since 1985	Univ. of Mass. Dept. of Physics/Astronomy	Amherst, MA
Pleasure Dome	(514)345-8654	Support for Sapphire BBS Software	Craig Baker	Pinecliffe, CO
Practical Peripherals BBS	(414)354-8670	Home of PKZIP 1.10 Compression Utility	Timothy Campbell/Pinnacle Software	Montreal, Quebec
ProComm Support BBS	(804)490-5878	Sexually Explicit Fantasy Chat System - Adults only	Phil Katz/PKWare Incorporated	Glendale, WI
	(818)706-2467	Support BBS for Practical Peripherals Modems	Tom Terrific	Tidewater, VA
	(314)875-0503	Home of ProCommPlus Communication Program	Thomas Smith/DataStorm Technologies Inc.	West Lake Village, CA
				Columbia, MO

Promised Land, The	(715)387-1339	16-Line/2.5GB/11,000+ Files/ WINDOWS, Chat & More	Tim Brown/Computer Solutions	Marshfield, WI
Public Brand Software BBS	(317)856-2087	Commercial Shareware Vendor	Public Brand Software	Indianapolis, IN
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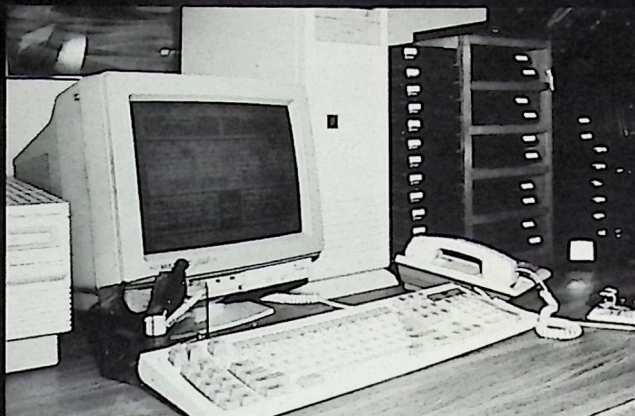
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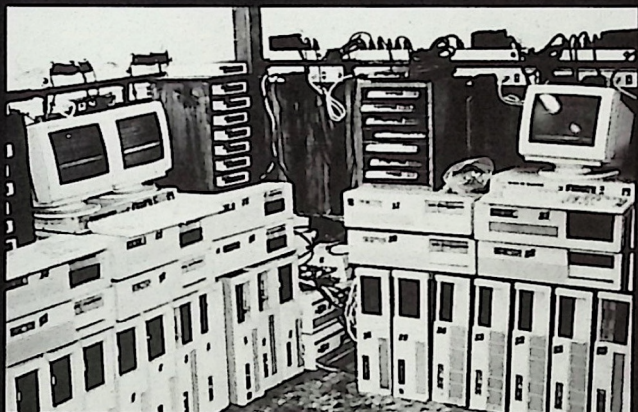
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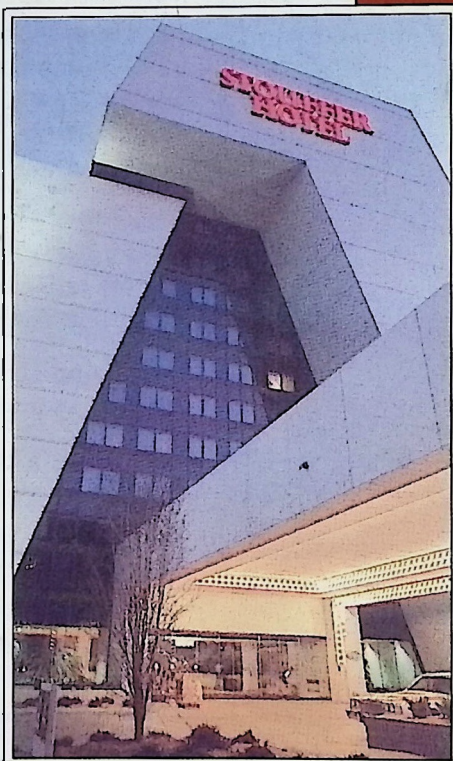
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